

D-T4/T40

SERVICE MANUAL

US Model
Canadian Model

D-T4

AEP Model
UK Model

E Model
Australian Model

D-T40



Discman

SPECIFICATIONS

CD section

System
Laser diode properties

Compact disc digital audio system
Material: GaAlAs
Wavelength: 780 nm
Emission duration: Continuous
Laser output: Less than 44.6 μW
(This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.)
20–20,000 Hz; ±3 dB
Line output (stereo minijack)
Output level 1 V rms at 47 kilohms
Load impedance over 10 kilohms
Headphones (stereo minijack)
9 mW + 9 mW at 32 ohms

Frequency response
Output (at 9 V input level)

Radio section

Frequency range

FM: 87.6–108 MHz (US, Canadian, UK, E, Australian model)
87.6–107 MHz (AEP, French model)
87.5–108 MHz (Italian model)
AM: 530–1,605 kHz (US, Canadian, UK, E, Australian model)
531–1,602 kHz (AEP, French model)
526.5–1,606.5 kHz (Italian model)

Antennas

FM: Headphones cord or connecting cord antenna
AM: Built-in ferrite bar antenna

General

Power requirements

Supplied:
• Rechargeable battery pack BP-3
• DC in 9V jack accepts the Sony AC power adaptor

Where purchased	Operating voltage
US, Canadian	120V AC, 60Hz
UK, Australian	240V AC, 50Hz
AEP, French, Italian	220V AC, 50Hz
E	110–240V AC, 50/60Hz

Power consumption
Dimension

1.2W DC
Approx. 136×38.5×147 mm (5¹/₈×1¹/₁₆×5⁷/₁₆ in.) (w/h/d)
not incl. inclined part (depth), projecting parts and controls
Approx. 137.5×39.5×149 mm (5¹/₂×1¹/₁₆×5⁷/₁₆ in.) (w/h/d)
incl. projecting parts and controls

Weight

Approx. 520 g (1 lb 2 oz) net
Approx. 700 g (1 lb 9 oz) incl. rechargeable battery pack

Supplied accessories

AC power adaptor (1)
Rechargeable battery pack (1)
Connecting cord (1)
Carrying case (1)
Carrying belt (1)
Headphone (1) (UK model)
AC plug adaptor (1) (E model)

Supplied battery pack (BP-3)

Output voltage 6V
Capacity 1000 mA/h
Dimensions Approx. 31.3×17.3×118.6 mm (1¹/₈×3¹/₁₆×4³/₄ in.) (w/h/d)
Weight Approx. 180 g (6¹/₂ oz)

Charging time/Battery life

Charging time	Continuous disc playing time	Continuous radio reception
8 hours (fully charged)	approx. 4 hours	approx. 20 hours
5 hours (90% charged)	approx. 3.5 hours	—

Notes on charging

- For charging, use only the supplied AC power adaptor. If not, the player will be damaged.
- The CD player can also be operated during charging. In this case, approx. 24 hours are necessary for a full charge. However, when the CD player does not operate normally, stop it and charge the unit for a while.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

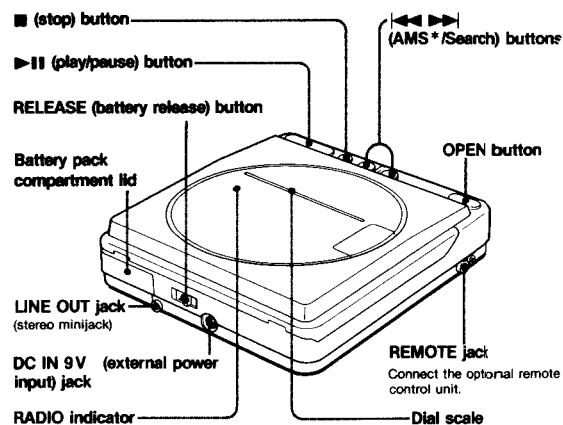
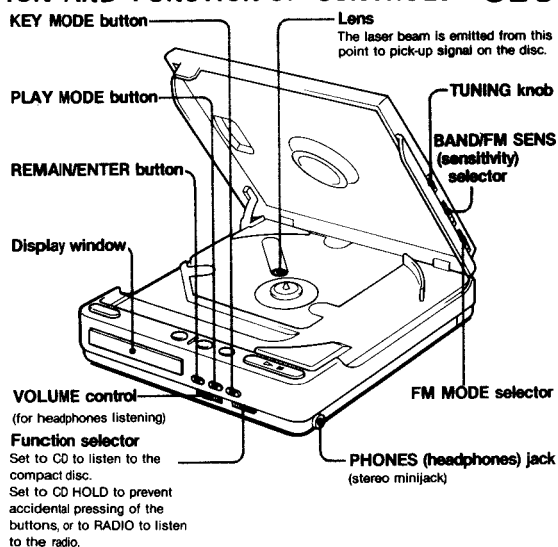


MICROFILM

FM/AM COMPACT DISC COMPACT PLAYER SONY®

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LOCATION AND FUNCTION OF CONTROLS SECTION 1 GENERAL



*AMS is an abbreviation of Automatic Music Sensor.

SECTION 2 SERVICING NOTES



NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc., on clothing and the human body.


During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

Before Replacing the Optical Block

Please be sure to check thoroughly the parameters as per the "Optical Block Checking Procedures" (Part No. : 9-960-027-11) issued separately before replacing the optical block. Note and specifications required to check are given below.

- FOK output : IC501 @ pin
When checking FOK, remove the lead wire to disc motor and unsolder and open IC801 @ pin (FOK).
- S curve P-to-P value : 3Vp-p
When checking S curve P-to-P value, remove the lead wire to disc motor.
- Adjusted part for focus gain adjustment : RV501
- RF signal P-to-P value : 0.7 - 1.25Vp-p
- Traverse signal P-to-P value : 1.5Vp-p
- The repairing grating holder is impossible.
- Adjusted part for tracking gain adjustment : RV502

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe more than 25cm away from the objective lens.

Laser Diode Check Procedure

The laser diode on this set will not emit unless the top panel is closed and S801 (leaf SW type) is turned on. The laser diode will always emit even if focus search is not performed in service mode.

The laser diode is checked using the current value which flows to the laser diode inside the optical pick-up block.

Procedure 1 (service mode or normal operation)

Check the laser diode emission with the eye.

1. Open upper panel.
2. S801 on as Fig. 1.
(In service mode, this operation is not necessary.)
3. Press the ►|| key.
(In service mode, this operation is not necessary.)
4. Observe the objective lens and confirm that the laser diode is emitting light. At this time, the laser diode goes on about 10 seconds due to focus search. If it does not, APC circuit or optical pick-up block is defective.

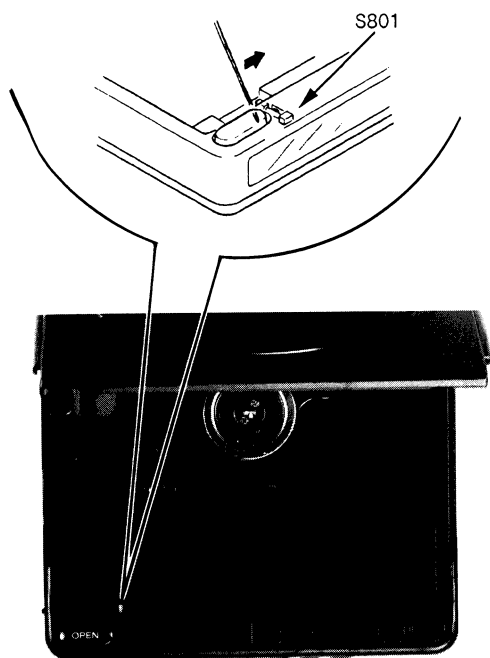


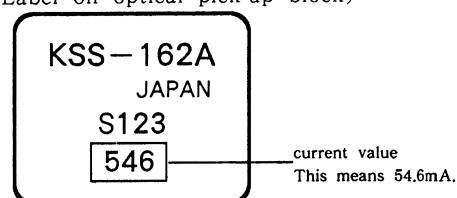
Fig.1 Turning S801 on

Procedure 2 (service mode or normal operation)

Check by the current with flows in the laser diode.

1. Close the top panel.
2. Remove the main board and read the current value on the label affixed to the optical pick-up block.

(Label on optical pick-up block)



The current value varies with the set.

3. Connect a VOM as shown in Fig. 2.
4. Press the ►|| key.
5. Calculate the current by the VOM reading.
VOM reading (V) $\div 10$ = current (A)
ex. VOM reading = 0.56V
 $0.56 \div 10 = 0.056$ (A) = 56 (mA)
6. Confirm that the ammeter reading is within the range given below.
value on label: 54.6mA (25°C)
variation relative to temperature: 0.4mA/°C
(Current increases when temperature rises and decreases when it drops.)

If the value is more than the range give, APC circuit has been defective or the laser diode has deteriorated. If it is less, APC circuit or optical pick-up block is defective.

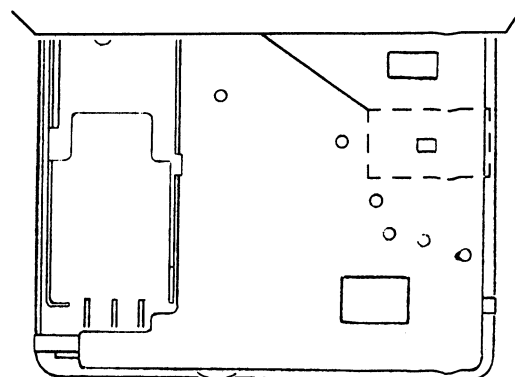
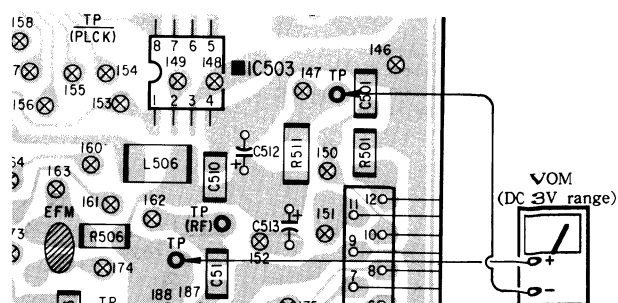


Fig.2 VOM Connection

SERVICE MODE (service program)

This set has built-in service program in the microcomputer as usual sets.
The operation method of service program is explained below.

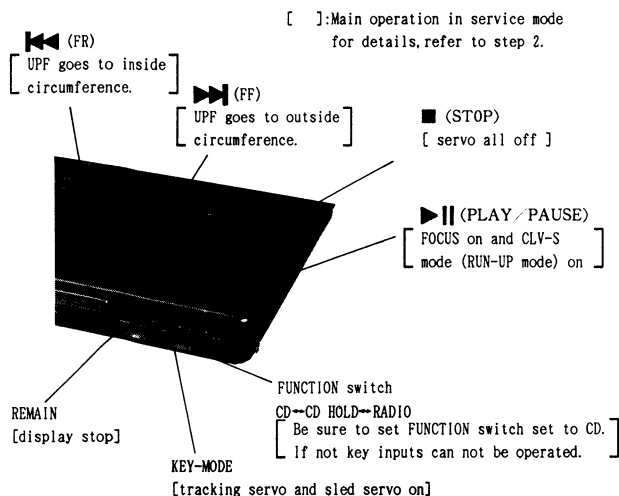


Fig.3 Key Positions

• Step 1 (Service Mode setting method)

1. Turn the FUNCTION switch set to CD with the external power supply not plugged in (no power applied to set) and press the ▶|| key.
2. Solder jumper TEST terminal.
(IC801 pin ④ (TEST) is grounded.)
3. Plug in external power supply.
This puts the set into service mode.

• Step 2 (Service Mode operation)

1. When service mode is set, the display will change 6 times, and those 6 changes will be repeated over and over.
With this the LCD display should be present in service mode. Even if LCD does not display, other operations will be performed.
2. When ▶|| or ◀ key is pressed, the optical pick-up block moves to the inside or outside circumference. Tracking servo and sled servo go off when this is done, so press KEY-MODE to turn on the tracking servo if necessary.
3. When REMAIN is pressed, the display stops. When REMAIN is released, the display continues to change. This allows check of each segment.
4. When ▶|| Key is pressed, CLV-S (pull-in mode) starts while performing focus search. When there is no disc installed, focus search is repeated several times while disc motor is rotating.
5. When KEY-MODE is pressed, tracking servo, sled servo and CLV-A (servo during PLAY) go ON.
6. When 4 and 5 are performed, the disc begins to play. At this time, the top panel should be closed and S801 are to be ON. A sound is not produced as muting is ON.
7. All servo (focus, tracking, sled and spindle) go off when ■ key is pressed.

• Step 3 (Service Mode release)

1. First be sure to unplug the external power supply, then remove the solder jumper TEST terminal.
2. The set will now operate normally.

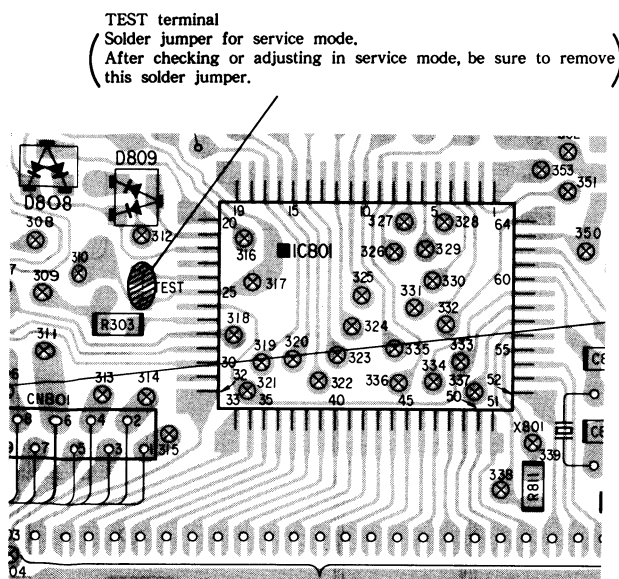
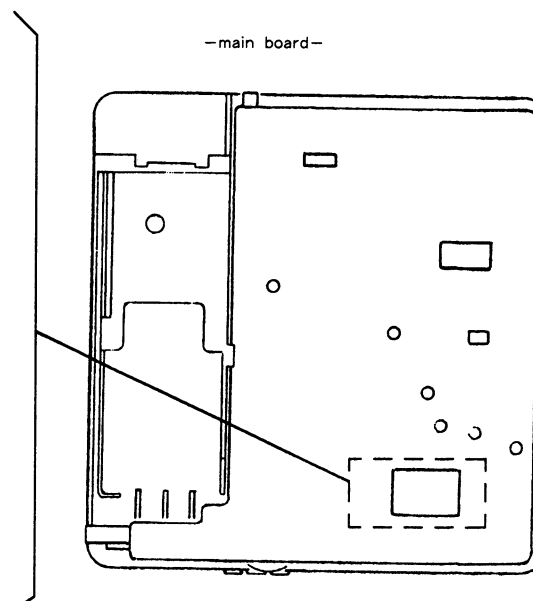


Fig.4 TEST terminal position



SECTION 3

ELECTRICAL ADJUSTMENTS

CD SECTION

Notes on Adjustment

1. Perform adjustments except for RECHARGEABLE VOLTAGE ADJUSTMENT in service mode.
Be sure to release service mode after completing adjustment.
(Refer to "Service Mode (service program)" on page 4.)
2. Perform adjustments in the order given.
3. Use YEDS-18 disc (part No.: 3-702-101-01) unless otherwise indicated.
4. Power supply voltage : DC 9V
FUNCTION switch : CD

PREPARATION

Put the set into service mode (See page 4.) and perform the following checks. Repair if there are any abnormalities.

• Sled Motor Check

1. Press the OPEN button and open the top panel.
2. Press the ►, ◄ keys and make sure that the optical pick-up block moves smoothly, without catching, from the inmost → outmost → inmost circumference.
►: optical pick-up block moves outward
◄: optical pick-up block moves inward

• Focus Search Check

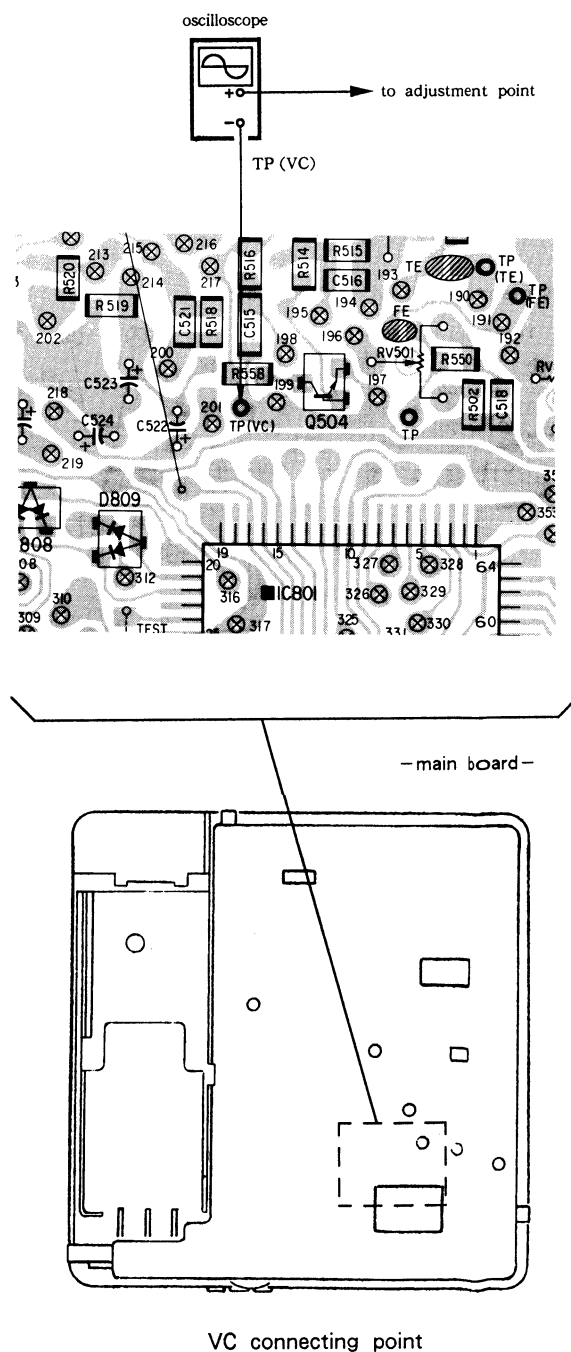
1. Press the OPEN button and open the top panel.
2. Press the ► key. (Focus search is performed continuously.)
3. Observe the optical pick-up block objective lens and check that it moves smoothly up and down with no catching or noises.
4. Press the ■ key.
Check that focus search operation stops. If it does not, press the ■ key again.

VC (1/2 Vcc) Connecting Point

FOCUS BIAS ADJUSTMENT

TRACKING BALANCE ADJUSTMENT

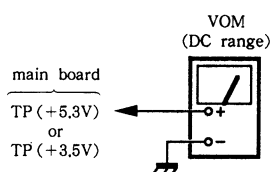
When the adjustments above are performed, connect the ⊖ side of oscilloscope to the point below.



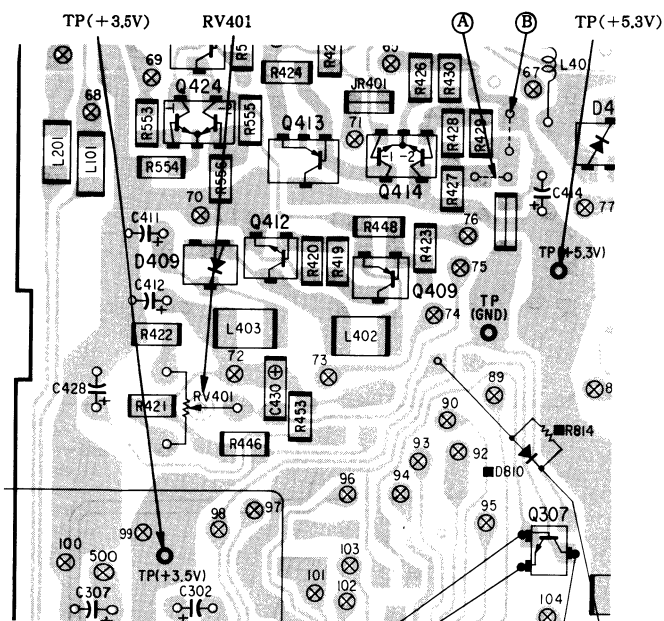
5.3V Adjustment

Adjustment Procedure :

1. Put the set into service mode (see page4).
2. Connect the VOM to main board test point TP(+5.3V).
3. Adjust RV401 for 5.2V–5.3V reading on the VOM.
4. After adjustment, release service mode (see page4).




Adjustment Location : main board



3.5V Adjustment

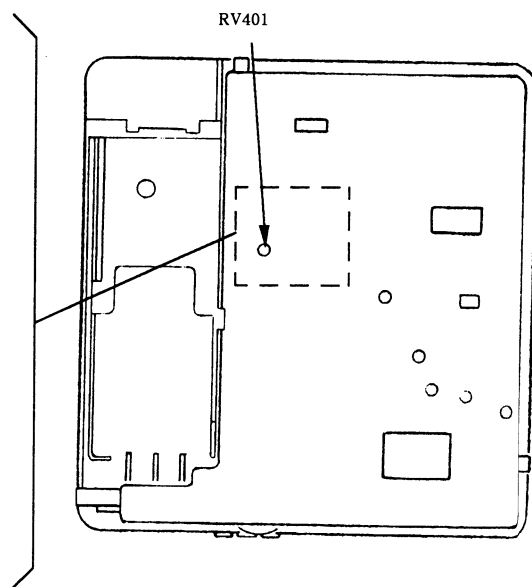
Adjustment Procedure :

1. Put the set into service mode (see page 4).
2. Connect the VOM to main board test point TP (+3,5V).
3. Adjust the pattern connection (Ⓐ or Ⓑ) to obtain 3,45V to 3,6V reading on the VOM.

pattern connection		VOM reading
(A)	(B)	
○	x	<div style="text-align: center;"> down  up </div>
x	x	
x	○	
○	○	
○	○	

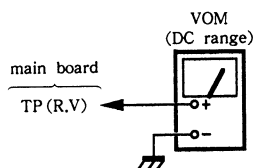
○ : short x : open

4. After adjustment, release service mode (see page 4).



Rechargeable Voltage Adjustment

Adjustment Procedure :

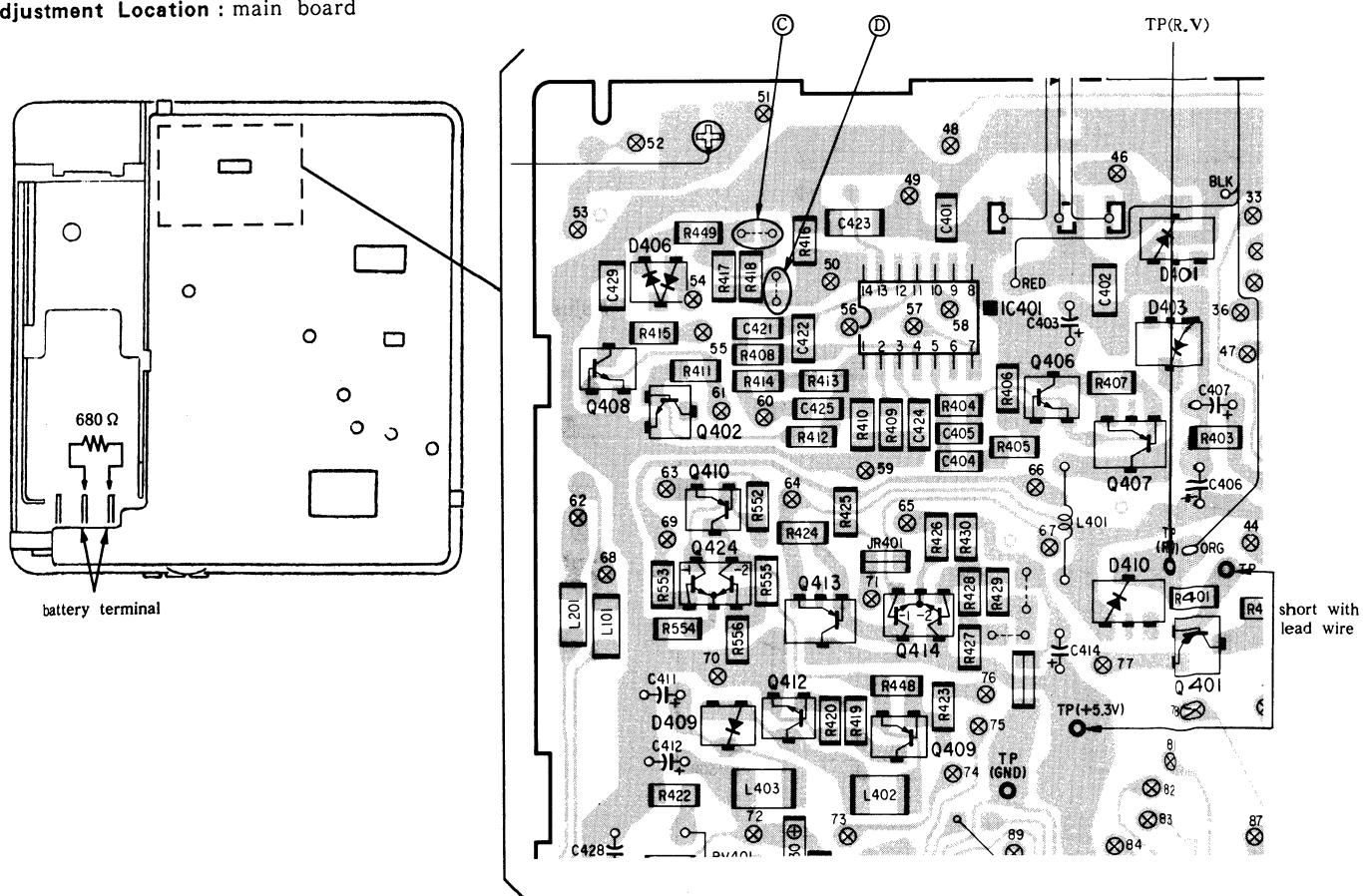


1. Connect the VOM to main board test point TP(R.V).
2. Short between the Q401 base and GND. Connect a 680 Ω resistor between pin ② and pin ③ of battery terminal as shown below.
3. Apply DC 9V with required dc power supply from external power jack CNJ401.
4. Adjust the pattern connection(Ⓒ or Ⓓ) to obtain 7.25 to 7.47V reading on the VOM.

pattern connection		VOM reading
C	D	
○	○ or x	<div style="text-align: center;"> down ↑ up </div>
x	○	
x	x	
○ : short x : open		

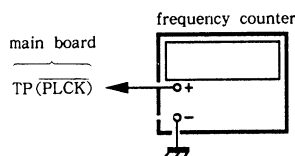
Note : Measure after the VOM reading becomes stable.

Adjustment Location : main board



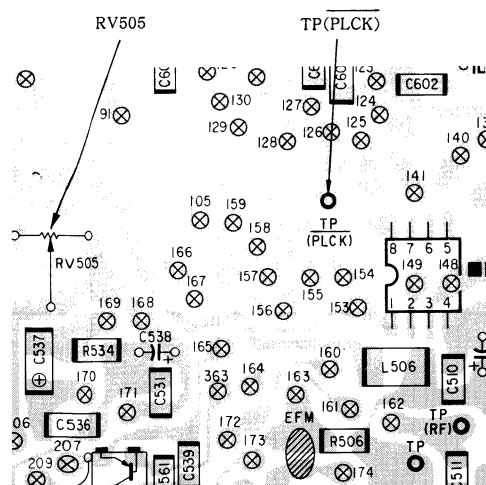
PLL Free Run Frequency Check and Adjustment

Check/Adjustment Procedure :

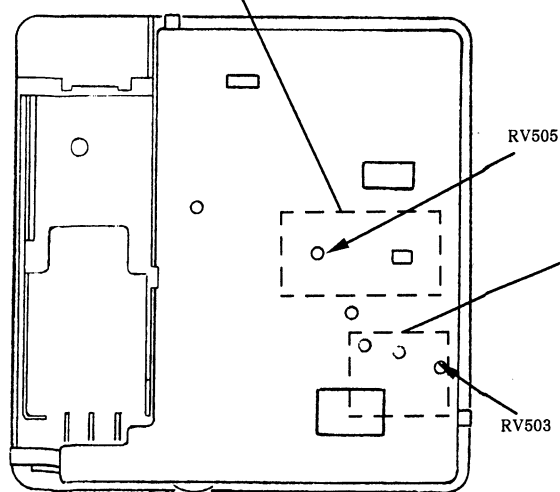


1. Disconnect EFM solder jumper terminal in the diagram below.
2. Connect a frequency counter to main board test point TP(PLCK).
3. Put the set into service mode (See page 4).
4. Check that the frequency counter reading is 4.31 ± 0.01 MHz. If not, adjust RV505 so that it is 4.31 ± 0.01 MHz.
5. After adjustment, release service mode (see page 4).
6. Short the jumper terminal disconnected in step 1.

Check/Adjustment Location : main board



EFM solder jumper terminal

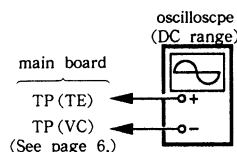


Tracking Balance Adjustment

Conditions :

The set should be placed either horizontally.

Adjustment Procedure :

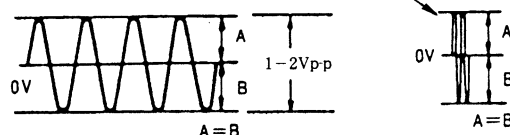


1. Connect the oscilloscope to main board TP(TE).
2. Put the set into service mode (See page 6.)
3. Press the **▶▶** and **◀◀** keys to move the optical pick-up block to the center.
4. Insert the disc (YEDS-18) and close the top panel.
5. Press the **▶▶** key.

It will go from focus search to focus on, and CLV pull-in mode state. Tracking and sled are OFF.

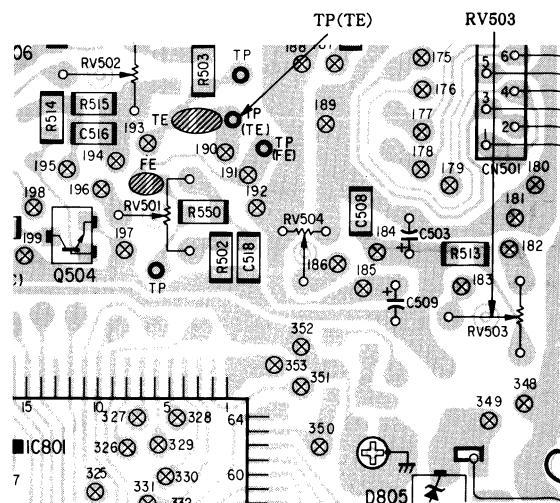
6. Adjust RV503 so that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0V.

Note : Take sweep time as long as possible to obtain best waveform.



7. Unplug the external power supply to stop spindle motor from rotating.
8. After adjustment, release service mode (see page 4).

Adjustment Location : main board

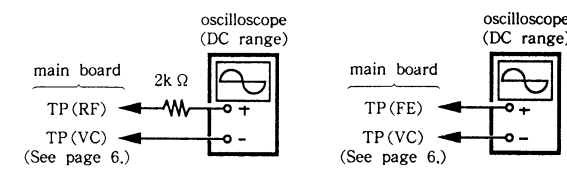


Focus Bias Adjustment

Conditions :

The set should be placed either horizontally.

Adjustment Procedure :



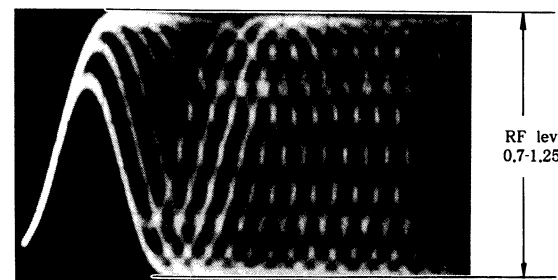
1. Put the set into service mode (See page 4).
2. Connect the oscilloscope to main board test point TP(RF).
3. Press the **▶▶** and **◀◀** key to move the optical pick-up block to the center.(Move the optical pick-up block to the music area on the disc to enable easy visibility of the eye pattern).
4. Insert the disc (YEDS-18) and close the top panel.
5. Press the **▶▶** key.

It will go from focus search to focus on, and CLV pull-in mode state,Tracking and sled are OFF.

6. Press the KEY-MODE button (Tracking and sled go ON.)
7. Adjust RV504 so that the oscilloscope waveform eye pattern is good. A good eye pattern means that the diamond shape (◇) in the center of the waveform can be clearly distinguished.

• RF Signal Reference Waveform (eye pattern)

VOLT/DIV : 200mV
TIME/DIV : 500nS



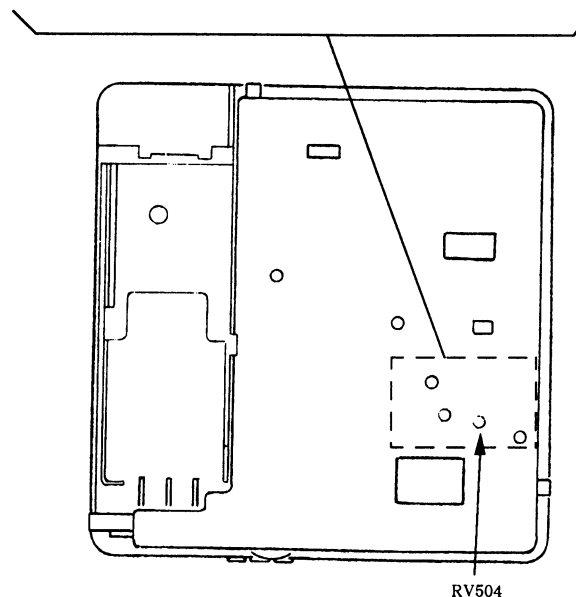
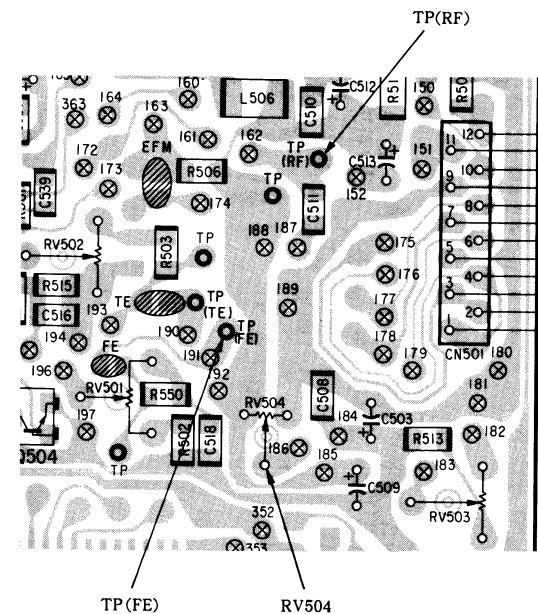
When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity.

8. Unplug the external power supply to stop spindle motor from rotating.
9. Remove the disc and connect the oscilloscope to main board TP(FE).
10. Adjust RV503 again refering to the table followed.

voltage of TP (FE)	adjustment
more than +100mV	Not adjust again.
+50 to 100mV	Adjust RV503 again for +100mV reading on oscilloscope.
less than +50mV	Not adjust again.

11. After adjustment, release service mode (see page 6).

Adjustment Location : main board



Focus/Tracking Gain Adjustment

A frequency response analyzer or CD jig is necessary in order to perform this adjustment exactly.

However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore,do not perform this adjustment.

Focus/tracking gain determines the pick-up followup (vertical and horizontal) relative to mechanical noise and metchnical shock when the 2-axis device operate. However, as these reciprocate, the adjustment is at the point where both are satisfied.

- When gain is high, the noise when the 2-axis device operates increases.
- When gain is low, it is more susceptible to mechanical shock and skipping occurs more easily.

This adjustment is to be performed when replacing the following parts :

- UPF (optical pick-up block)
- RV501 (focus gain volume)
- RV502 (tracking gain volume)

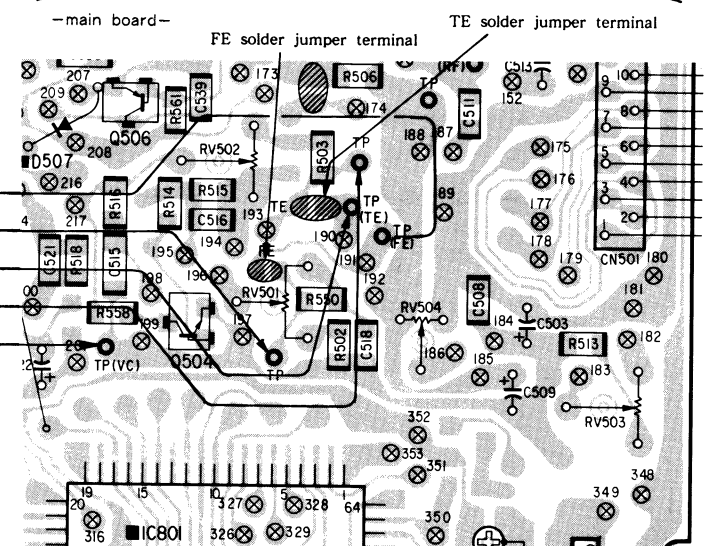
On this set, it is very difficult to simplify this adjustment. For those sets on which symptoms such as "occasional skipping" are hard to discover, or it is hard to tell if the set has been repaired, use the CD jig and perform this adjustment. Refer to the diagram below for connection of the CD jig. The adjustment procedure is described in the separate CD jig Instruction Manual.

Please be careful no to move RV501 (focus gain volume), RV502 (tracking gain volume) ordinarily.

CD jig connection :



CD jig

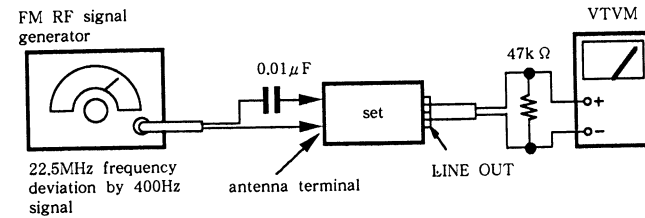


Remove the solder jumpers at the TE and FE locations and connect the CD jig.

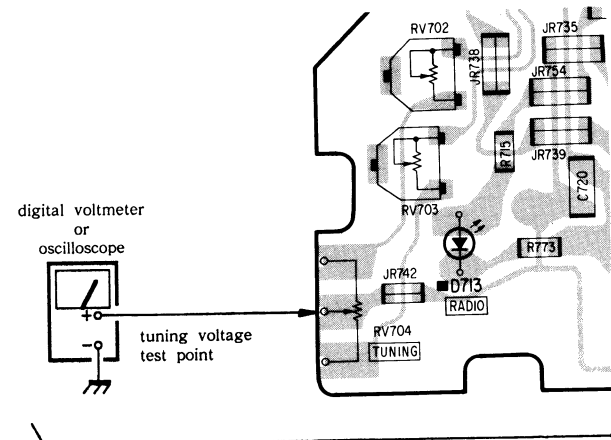
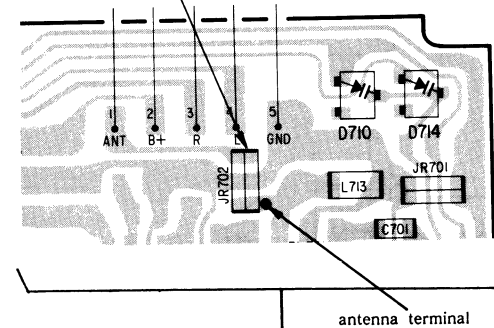
FM SECTION

Conditions :

- Function switch : RADIO
- Band switch : FM DX



- Repeat the procedures in each adjustment several times, and the frequency coverage adjustment should be finally done by the trimmer capacitors.
- Remove chip jumper for adjustments. Solder chip jumper after adjustments.



—radio board—

Adjustment parts	RV703	RV702
Digital voltmeter or oscilloscope reading	1V	9V
Dial pointer	f min.	f max.
Tuning Voltage Adjustment		

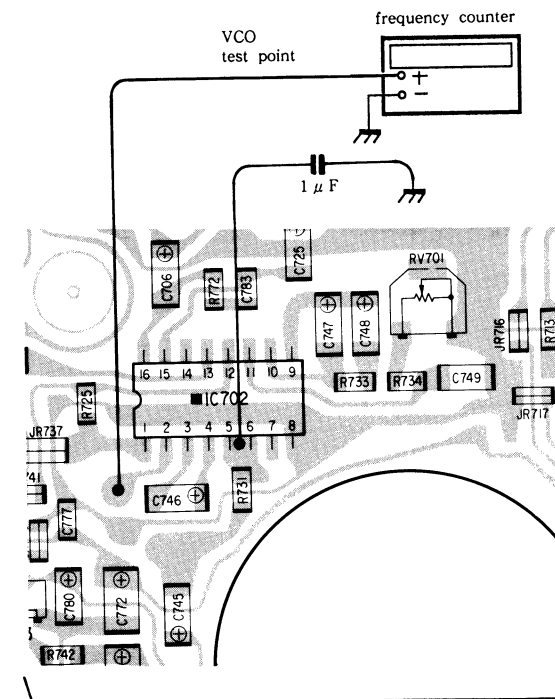
Adjustment parts	CT701	L702
SG frequency	109.5MHz (107.8MHz) [108.25MHz]	86.5MHz (87.35MHz) [87.35MHz]
Dial pointer	f max.	f min.
Adjust for maximum reading on VTVM.		
FM Frequency Coverage Adjustment		

no-mark : US, Canadian, UK, E, Australian
() : AEP, French
[] : Italian

VCO Adjustment

Adjustment Procedure :

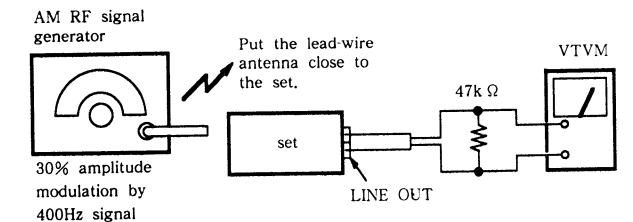
1. Connect a 1μF capacitor as follows.
2. Adjust RV701 for 19±0.02kHz on the frequency counter.
3. Remove the capacitor connected in step 1.



AM SECTION

Conditions :

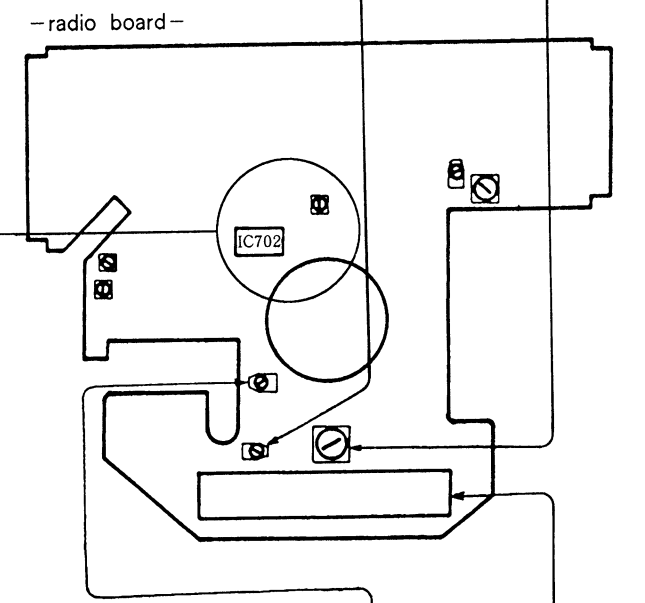
- Function switch : RADIO
- Band switch : AM



- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

AM Frequency Coverage Adjustment		
Adjust for a maximum reading on VTVM.		
Dial pointer	f max.	f min.
SG frequency	1,680kHz (1,631.5kHz) [1,631.5kHz]	515kHz (516.5kHz) [516.5kHz]
Adjustment parts	CT703	T702

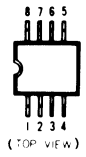
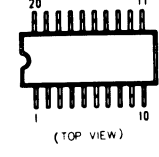
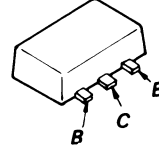
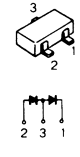
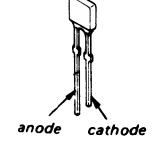
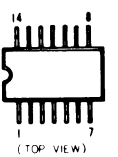
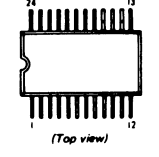
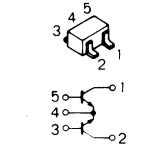
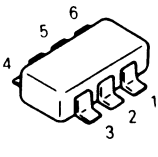
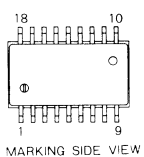
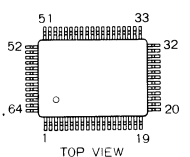
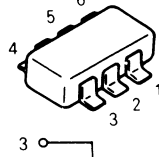
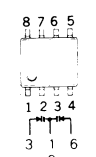
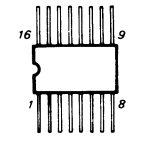
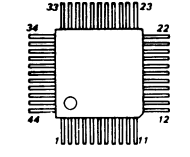
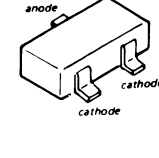
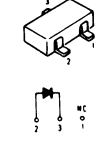
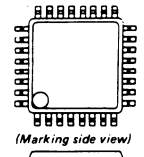
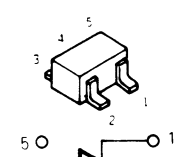
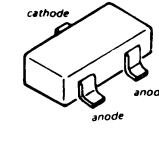
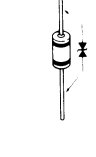
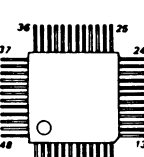
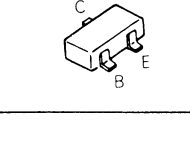
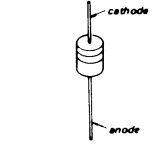
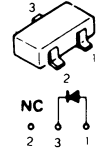
no-mark : US, Canadian, UK, E, Australian
() : AEP, French
[] : Italian



Adjustment parts	CT704	L711
SG frequency and dial pointer	1,400kHz	620kHz
Adjust for maximum reading on VTVM.		
AM Tracking Adjustment		

SECTION 4 DIAGRAMS

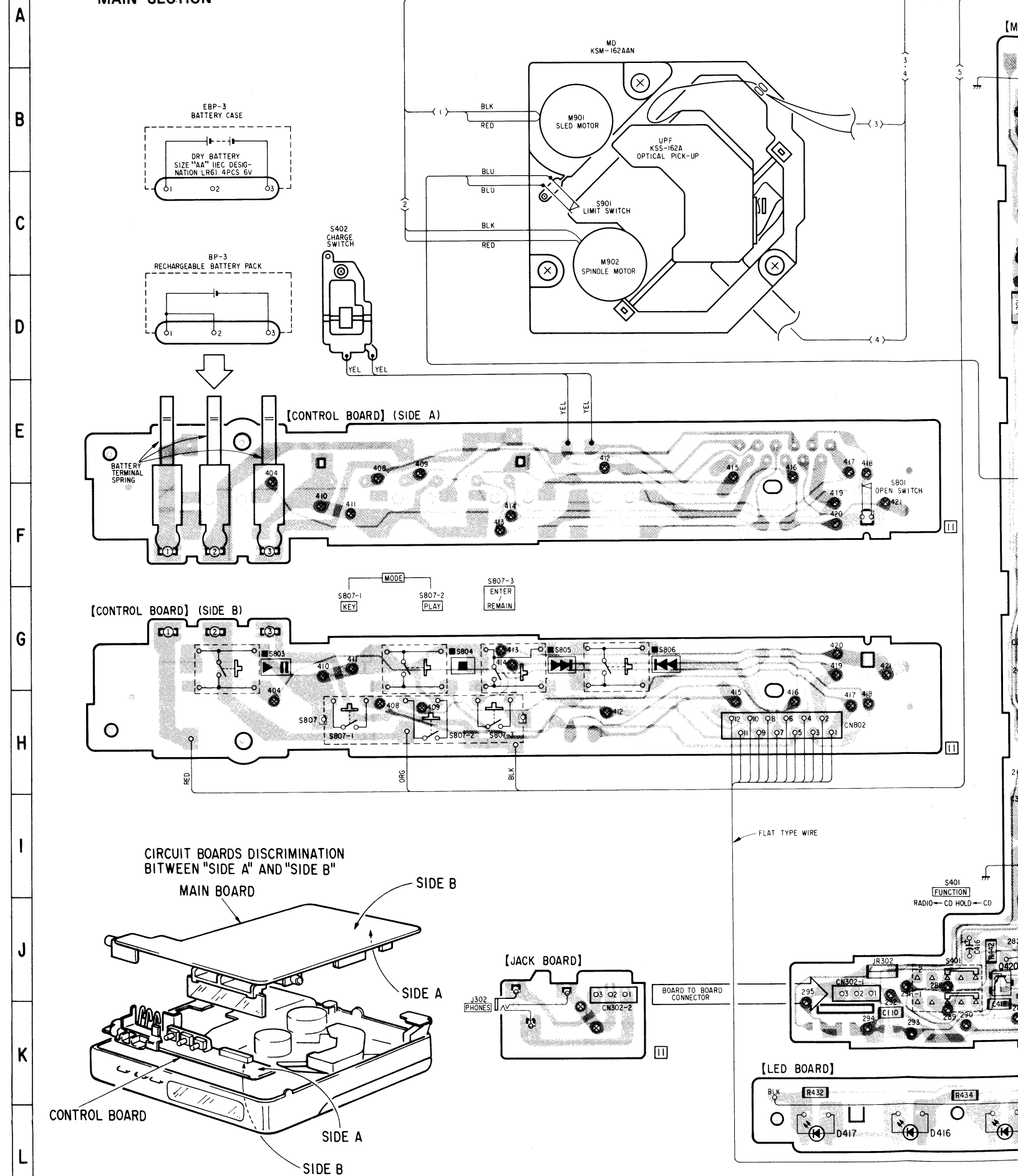
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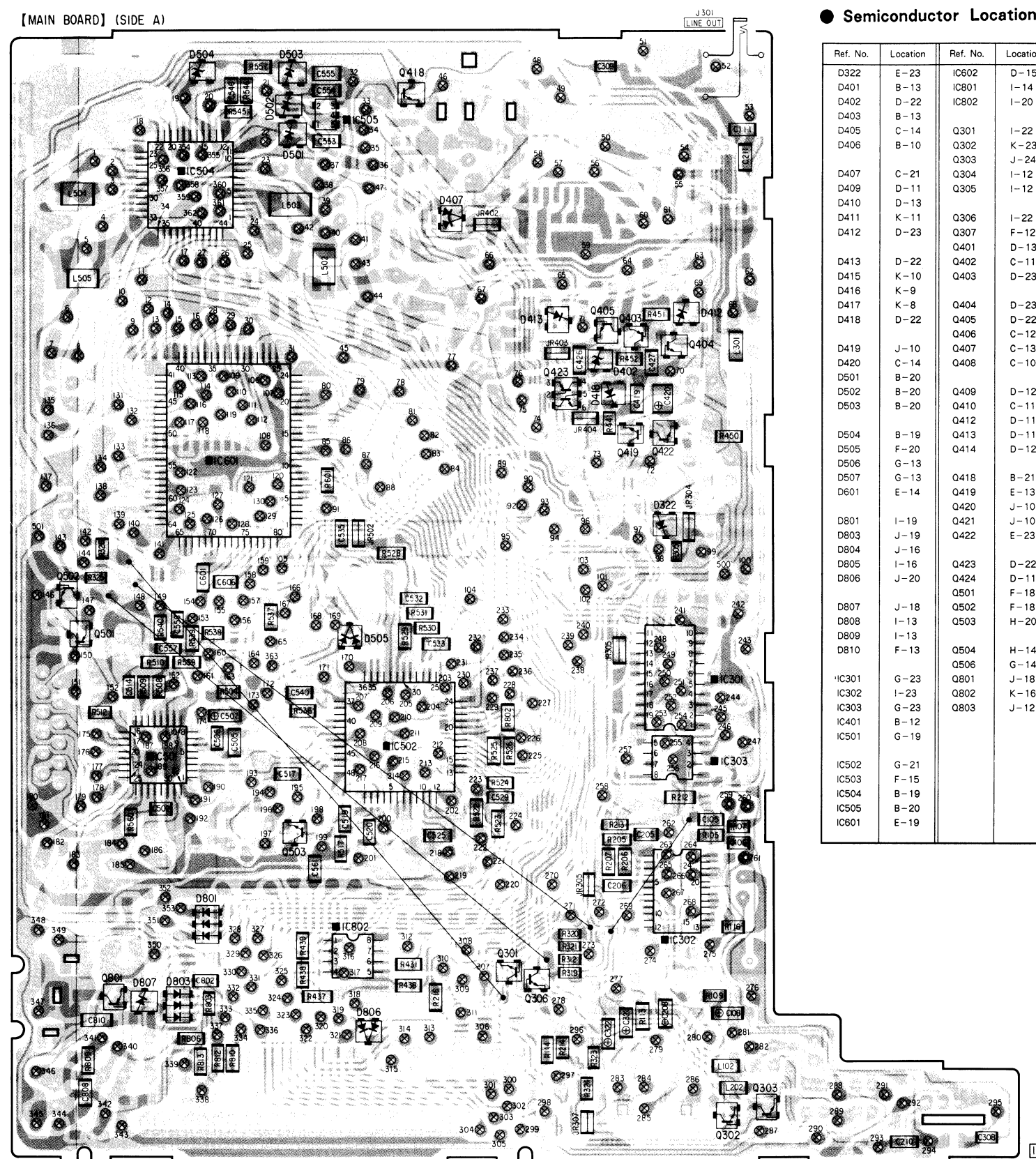
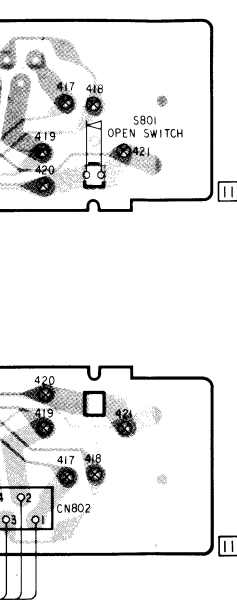
BA10358F NJM2903M NJM4560M  (TOP VIEW)	CXD1161M-3  (TOP VIEW)	2SB1120 2SD1664-Q  B C E	1SS123  2 3 1	SLP478C  anode cathode
BA9700F  (TOP VIEW)	CXK5816M-10L M51568FP  (TOP VIEW)	FMW1  1 2 3 4 5 6	IMN10  1 2 3 4 5 6	
CX10053B  MARKING SIDE VIEW	CXP5086-026Q  TOP VIEW	IMD3  1 2 3 4 5 6	KV1260M  1 2 3 4 5 6 7 8	
CX10054  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	MPC1715  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000	1S2835  anode cathode	RD2.7M-B2 RD5.6M-B1 RD5.6M-B2 RD7.5M-B1 RD10M-B2 RD12M-B1 SB01-05CP SB10-05PCP  1 2 3 4 5 6 7 8	
CXA1271Q  (Marking side view)	TC7S04F  1 2 3 4 5	1S2837 SVC203CP  anode cathode	RD9.1EW  1 2 3 4 5 6 7 8	
CXA1272Q-Z  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000	2SA812 2SB624-BV4 2SC1623 2SC2223-F13 2SC2223-F14 2SC2412K 2SC2714-Y 2SC2736 2SC2757-T33 2SD596 2SD1048 DTA114YK DTA124EK DTA144TK DTC114TK DTC124EK DTC144EK  C B E	1S119  cathode anode	SB05-05CP SLM-13VW  NC 1 2 3	

Note:

- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : parts mounted on the conductor side.
- ⊗ : Through hole.
- ▨ : Pattern on the side which is seen.
- ▩ : Pattern of the rear side.
- : Chip components extracted from the rear side.

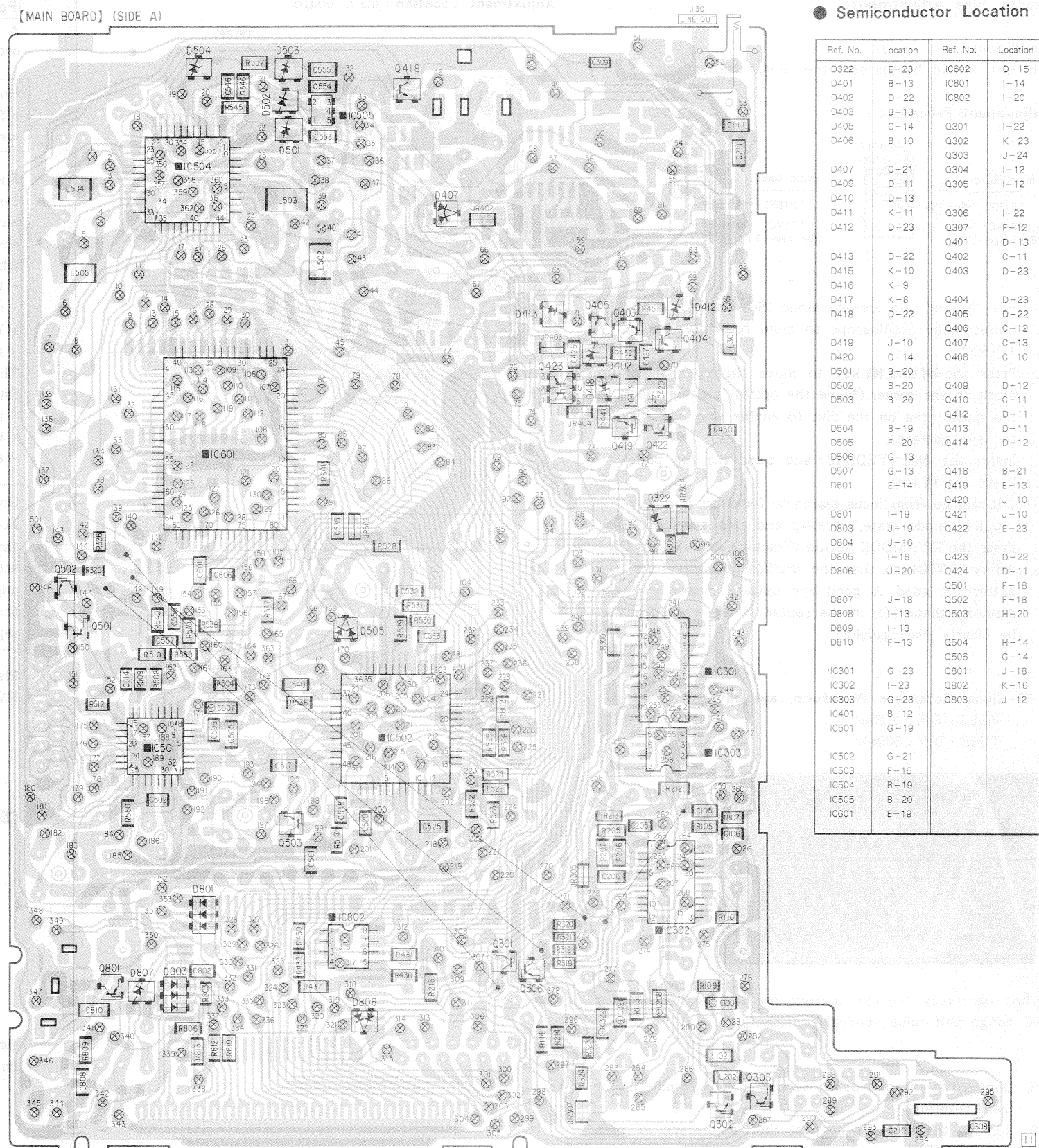
4-2. PRINTED WIRING BOARDS -MAIN SECTION-





Ref. No.	Location	Ref. No.	Location
D322	E-23	IC802	D-15
D401	B-13	IC801	I-14
D402	D-22	IC802	I-20
D403	B-13		
D405	C-14	Q301	I-22
D406	B-10	Q302	K-23
		Q303	J-24
D407	C-21	Q304	I-12
D409	D-11	Q305	I-12
D410	D-13		
D411	K-11	Q306	I-22
D412	D-23	Q307	F-12
		Q401	D-13
D413	D-22	Q402	C-11
D415	K-10	Q403	D-23
D416	K-9		
D417	K-8	Q404	D-23
D418	D-22	Q405	D-22
		Q406	C-12
D419	J-10	Q407	C-13
D420	C-14	Q408	C-10
D501	B-20		
D502	B-20	Q409	D-12
D503	B-20	Q410	C-11
		Q412	D-11
D504	B-19	Q413	D-11
D505	F-20	Q414	D-12
D506	G-13		
D507	G-13	Q418	B-21
D601	E-14	Q419	E-13
		Q420	J-10
D801	I-19	Q421	J-10
D803	J-19	Q422	E-23
D804	J-16		
D805	I-16	Q423	D-22
D806	J-20	Q424	D-11
		Q501	F-18
D807	J-18	Q502	F-18
D808	I-13	Q503	H-20
D809	I-13		
D810	F-13	Q504	H-14
		Q506	G-14
IC301	G-23	Q801	J-18
IC302	I-23	Q802	K-16
IC303	G-23	Q803	J-12
IC401	B-12		
IC501	G-19		
IC502	G-21		
IC503	F-15		
IC504	B-19		
IC505	B-20		
IC601	E-19		

Ref. No.	Location	Ref. No.	Location
D322	E-23	IC802	D-15
D401	B-13	IC801	I-14
D402	D-22	IC802	I-20
D403	B-13		
D405	C-14	Q301	I-22
D406	B-10	Q302	K-23
		Q303	J-24
D407	C-21	Q304	I-12
D409	D-11	Q305	I-12
D410	D-13		
D411	K-11	Q306	I-22
D412	D-23	Q307	F-12
		Q401	D-13
D413	D-22	Q402	C-11
D415	K-10	Q403	D-23
D416	K-9		
D417	K-8	Q404	D-23
D418	D-22	Q405	D-22
		Q406	C-12
D419	J-10	Q407	C-13
D420	C-14	Q408	C-10
D501	B-20		
D502	B-20	Q409	D-12
D503	B-20	Q410	C-11
		Q412	D-11
D504	B-19	Q413	D-11
D505	F-20	Q414	D-12
D506	G-13		
D507	G-13	Q418	B-21
D601	E-14	Q419	E-13
		Q420	J-10
D801	I-19	Q421	J-10
D803	J-19	Q422	E-23
D804	J-16		
D805	I-16	Q423	D-22
D806	J-20	Q424	D-11
		Q501	F-18
D807	J-18	Q502	F-18
D808	I-13	Q503	H-20
D809	I-13		
D810	F-13	Q504	H-14
		Q506	G-14
IC301	G-23	Q801	J-18
IC302	I-23	Q802	K-16
IC303	G-23	Q803	J-12
IC401	B-12		
IC501	G-19		
IC502	G-21		
IC503	F-15		
IC504	B-19		
IC505	B-20		
IC601	E-19		






Ref. No.	Location	Ref. No.	Location
D322	E-23	IC602	D-15
D401	B-13	IC801	I-14
D402	D-22	IC802	I-20
D403	B-13		
D405	C-14	Q301	I-22
D406	B-10	Q302	K-23
		Q303	J-24
D407	C-21	Q304	I-12
D409	D-11	Q305	I-12
D410	D-13		
D411	K-11	Q306	I-22
D412	D-23	Q307	F-12
		Q401	D-13
D413	D-22	Q402	C-11
D415	K-10	Q403	D-23
D416	K-9		
D417	K-8	Q404	D-23
D418	D-22	Q405	D-22
		Q406	C-12
D419	J-10	Q407	C-13
D420	C-14	Q408	C-10
D501	B-20		
D502	B-20	Q409	D-12
D503	B-20	Q410	C-11
		Q412	D-11
D504	B-19	Q413	D-11
D505	F-20	Q414	D-12
D506	G-13		
D507	G-13	Q418	B-21
D601	E-14	Q419	E-13
		Q420	J-10
D801	I-19	Q421	J-10
D803	J-19	Q422	E-23
D804	J-16		
D805	I-16	Q423	D-22
D806	J-20	Q424	D-11
		Q501	F-18
D807	J-18	Q502	F-18
D808	I-13	Q503	H-20
D809	I-13		
D810	F-13	Q504	H-14
		Q506	G-14
IC301	G-23	Q801	J-18
IC302	I-23	Q802	K-16
IC303	G-23	Q803	J-12
IC401	B-12		
IC501	G-19		
IC502	G-21		
IC503	F-15		
IC504	B-19		
IC505	B-20		
IC601	E-19		





- All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- % : indicates tolerance.

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

NOTE:
Les composants identifiés par une marque  sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Switch	Position
S401	FUNCTION	CD
S801	OPEN SWITCH	ON
S803	▶	OFF
S804	■	OFF
S805	▶▶	OFF
S806	◀◀	OFF
S807-1	KEY MODE	OFF
S807-2	PLAY MODE	OFF
S807-3	ENTER/REMAIN	OFF
S901	LIMIT SWITCH	OFF




- See page 4 setup of service mode

Diagram of the 16-pin connector for the 68000 microprocessor. The connector is a 16-pin D-subminiature connector. Pin 1 is labeled 'BATT' and is connected to the VCC pin of the 68000. Pin 2 is labeled 'PRESET' and is connected to the PRESET pin of the 68000. Pin 3 is labeled 'IALL' and is connected to the IALL pin of the 68000. Pin 4 is labeled 'A' and is connected to the A pin of the 68000. Pin 5 is labeled 'B' and is connected to the B pin of the 68000. Pin 6 is labeled 'SHUFFLE' and is connected to the SHUFFLE pin of the 68000. Pin 7 is labeled 'RMS' and is connected to the RMS pin of the 68000. Pin 8 is labeled 'MEM' and is connected to the MEM pin of the 68000. Pin 9 is labeled 'REMAIN' and is connected to the REMAIN pin of the 68000. Pin 10 is labeled 'STEREO' and is connected to the STEREO pin of the 68000. Pin 11 is labeled 'TV' and is connected to the TV pin of the 68000. Pin 12 is labeled 'FM' and is connected to the FM pin of the 68000. Pin 13 is labeled 'AM' and is connected to the AM pin of the 68000. Pin 14 is labeled 'CH' and is connected to the CH pin of the 68000. Pin 15 is labeled 'MHz' and is connected to the MHz pin of the 68000. Pin 16 is labeled 'kHz' and is connected to the kHz pin of the 68000. The diagram also shows the internal connections of the 68000 microprocessor, including the VCC, GND, and various control pins.

Diagram of the front panel of a radio receiver. The panel includes a **BATT** switch, a **PRESET** switch, a 4-digit display (TV, MHz, AM, KHz), and buttons for **SHUFFLE**, **RMS**, **MEM**, **REMAIN**, **STEREO**, **SEARCH**, **AUTO**, and **AMS MANUAL**. The diagram shows the internal wiring connecting these controls to the PCB pins.




● SCHEMATIC DIAGRAM — RADIO SECTION —

- Note:**
- All capacitors are in μF unless otherwise noted. pF : $\mu\mu\text{F}$ 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
 - % : indicates tolerance.

Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.	Note: Les composants identifiés par une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
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● Switch

Ref. No.	Switch	Position
S701	FM MODE	ST.
S702	BAND/FM SENS	FM DX

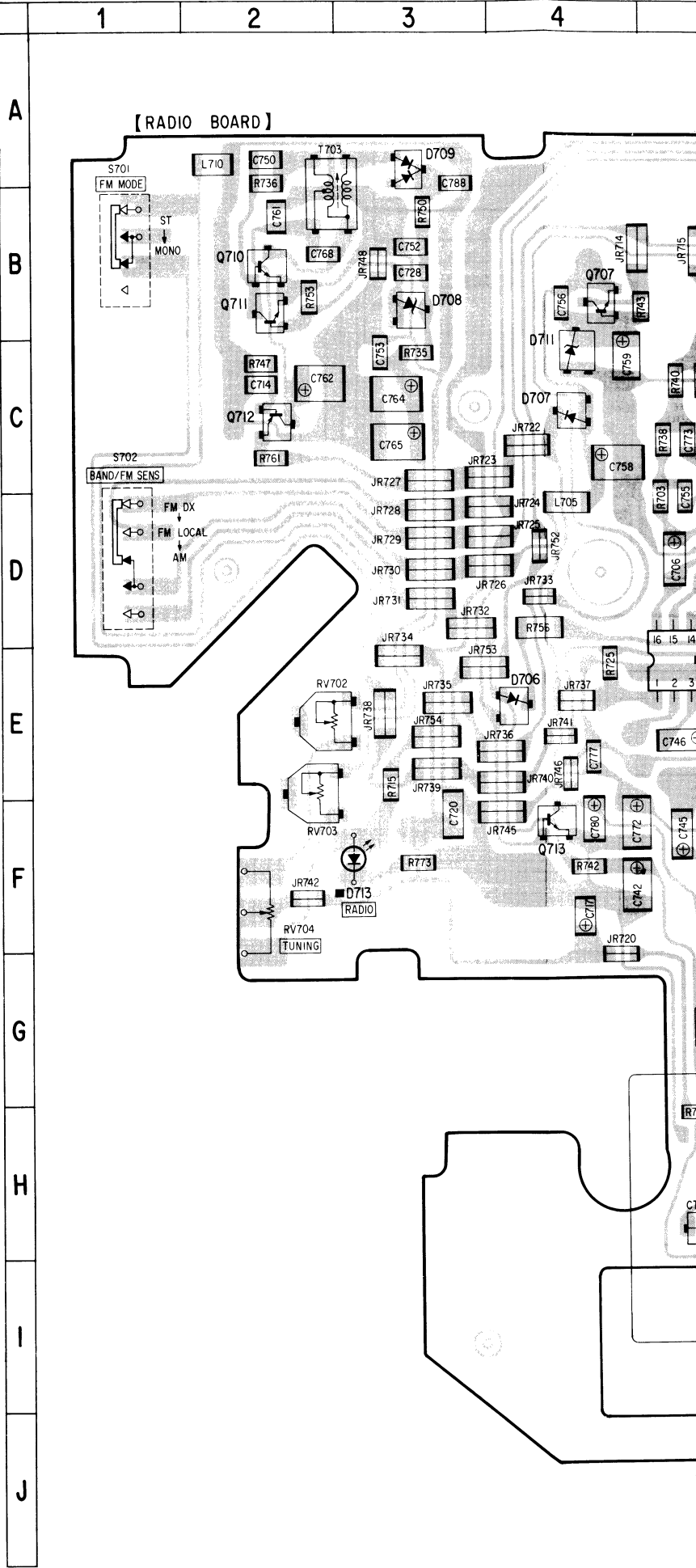
-  : B+ Line
-  : adjustment for repair.
- Power voltage is dc 9V and fed with regulated dc power supply from external power voltage jack.
- Voltage are dc with respect to ground under no-signal (detuned) conditions when FUNCTION switch set to CD. no mark: FM
(): AM
- Voltages are taken with a VOM (50 $\text{k}\Omega/\text{V}$). Voltage variations may be noted due to normal production tolerances.
- Signal path.
 : FM

● Semiconductor Location

Ref. No.	Location
D701	C-10
D702	C-8
D705	H-5
D706	E-4
D707	C-4
D708	B-3
D709	A-3
D710	B-11
D711	C-4
D712	B-7
D713	F-13
D714	B-14
IC701	G-8
IC702	E-5
Q701	C-11
Q702	D-10
Q703	D-8
Q706	D-8
Q707	B-4
Q708	B-7
Q710	B-2
Q711	B-2
Q712	C-2
Q713	F-4
Q714	E-8
Q715	F-8

- Note:**
-  : parts extracted from the component side.
 -  : parts extracted from the conductor side.
 -  : parts mounted on the conductor side.
 -  : Chip components extracted from the rear side.

4-4. PRINTED WIRING BOARDS — RADIO SECTION — ● See page 13



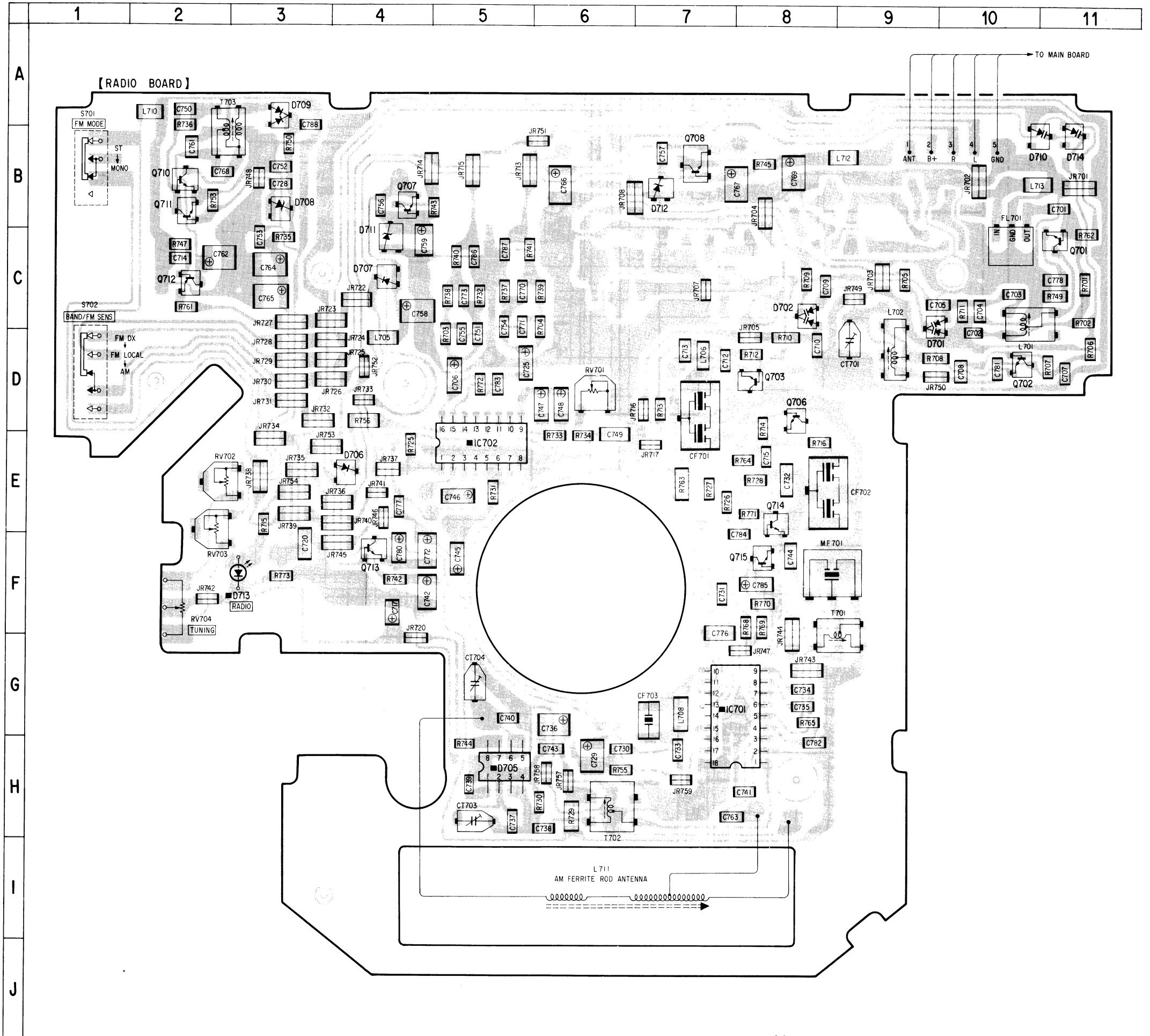
4-4. PRINTED WIRING BOARDS -RADIO SECTION- ● See page 13 for Semiconductors Leard Layouts

● Semiconductor Location

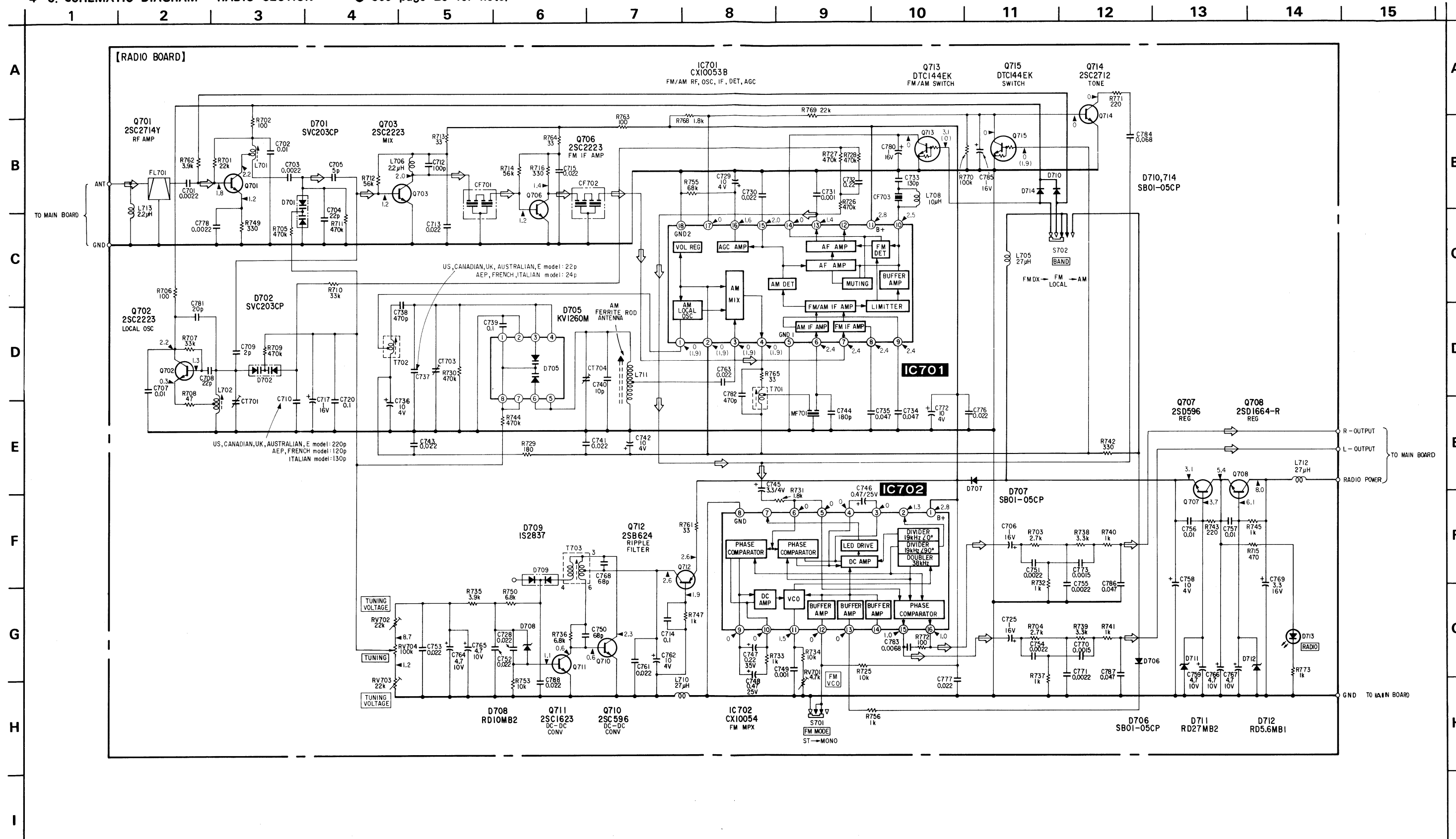
Ref. No.	Location
D701	C-10
D702	C-8
D705	H-5
D706	E-4
D707	C-4
D708	B-3
D709	A-3
D710	B-11
D711	C-4
D712	B-7
D713	F-13
D714	B-14
IC701	G-8
IC702	E-5
Q701	C-11
Q702	D-10
Q703	D-8
Q706	D-8
Q707	B-4
Q708	B-7
Q710	B-2
Q711	B-2
Q712	C-2
Q713	F-4
Q714	E-8
Q715	F-8

Note:

- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : parts mounted on the conductor side.
- : Chip components extracted from the rear side.



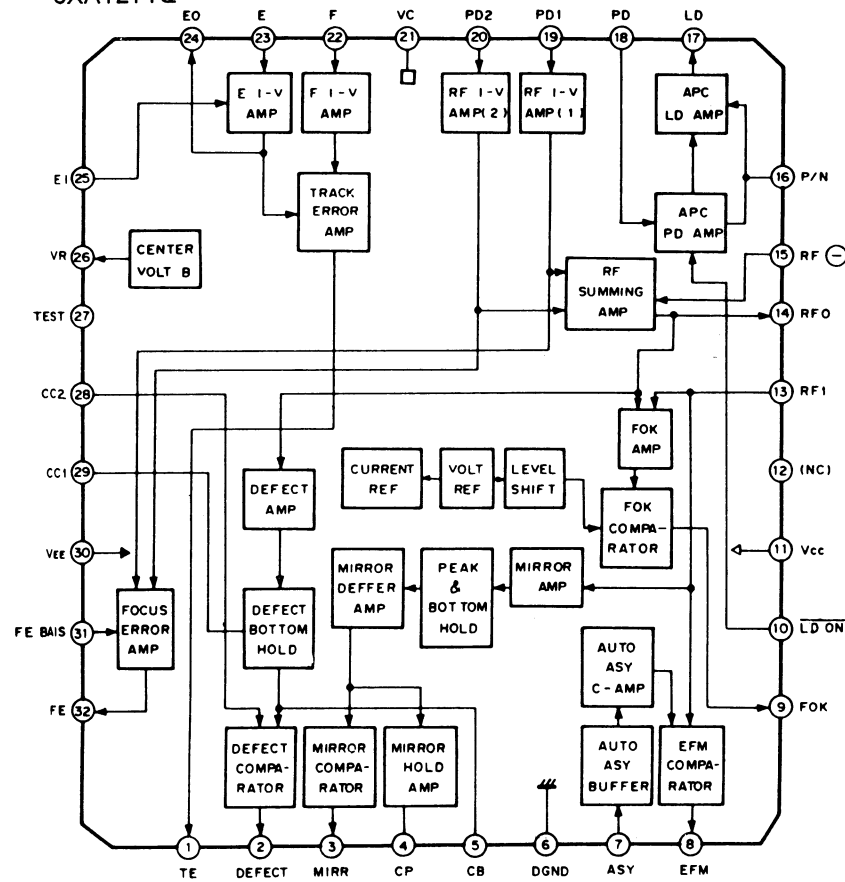
4-5. SCHEMATIC DIAGRAM -RADIO SECTION- ● See page 20 for note.



4-6. IC BLOCK DIAGRAM

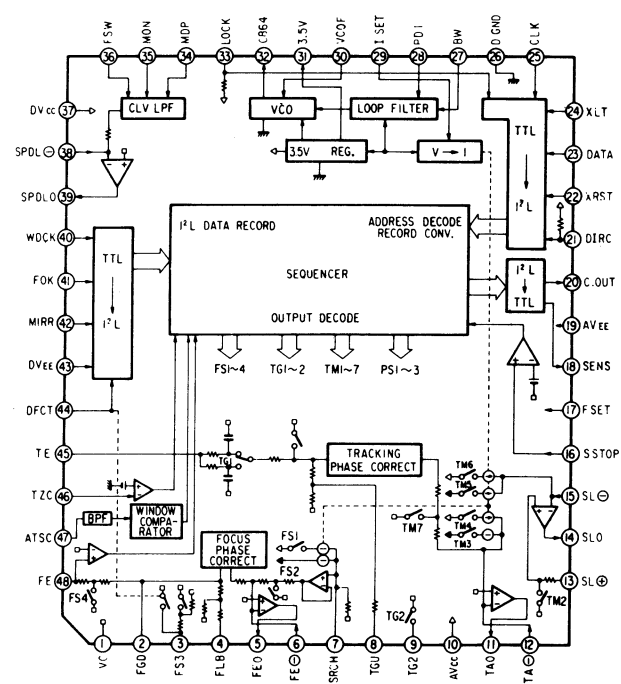
IC501

CXA1271Q



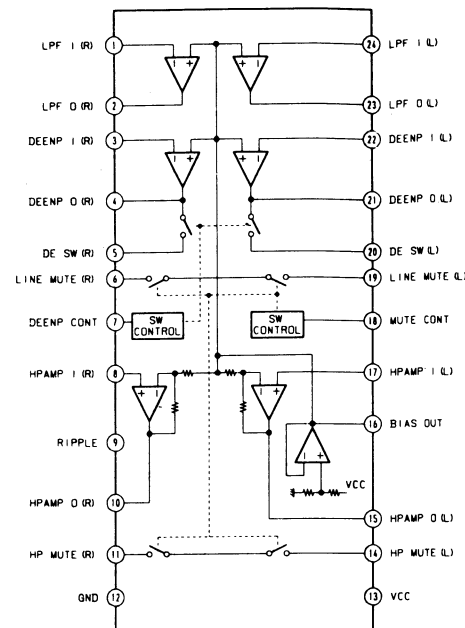
IC502

CXA1272Q-Z



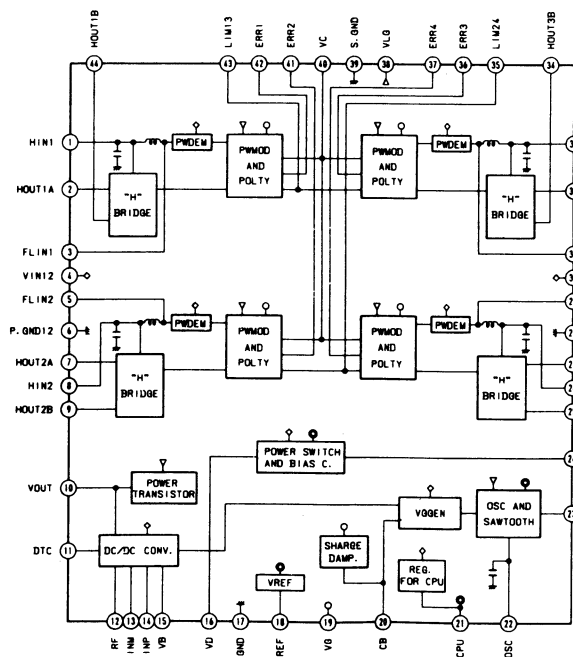
IC302

M51568FP



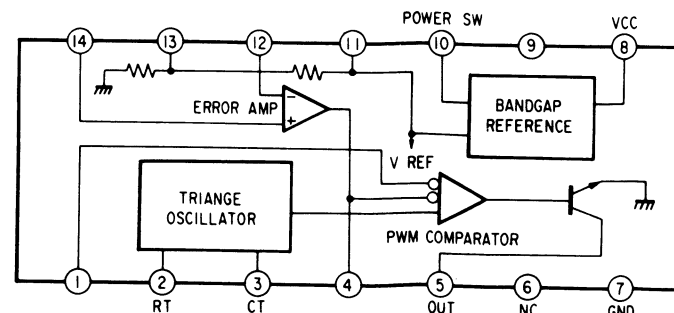
IC504

MPC1715



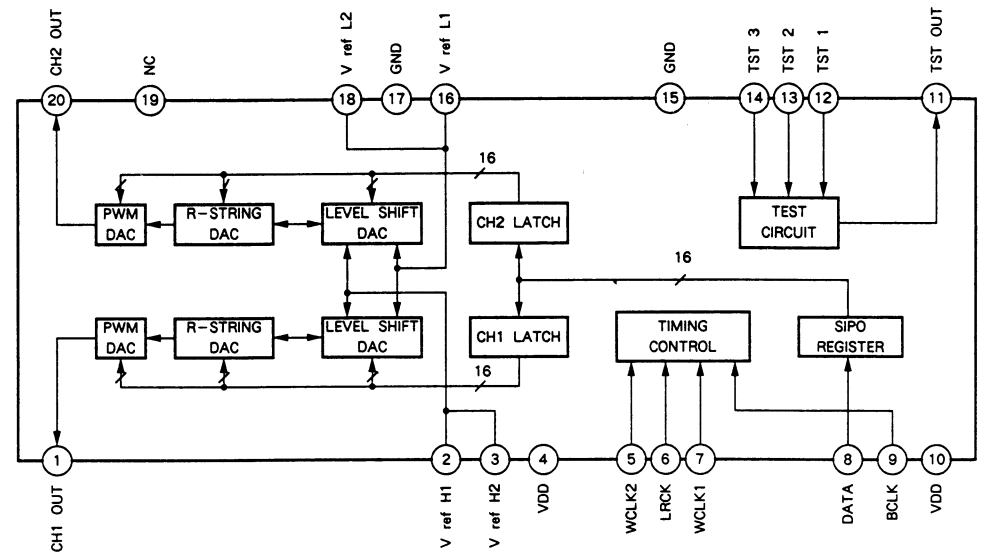
IC401

BA9700F



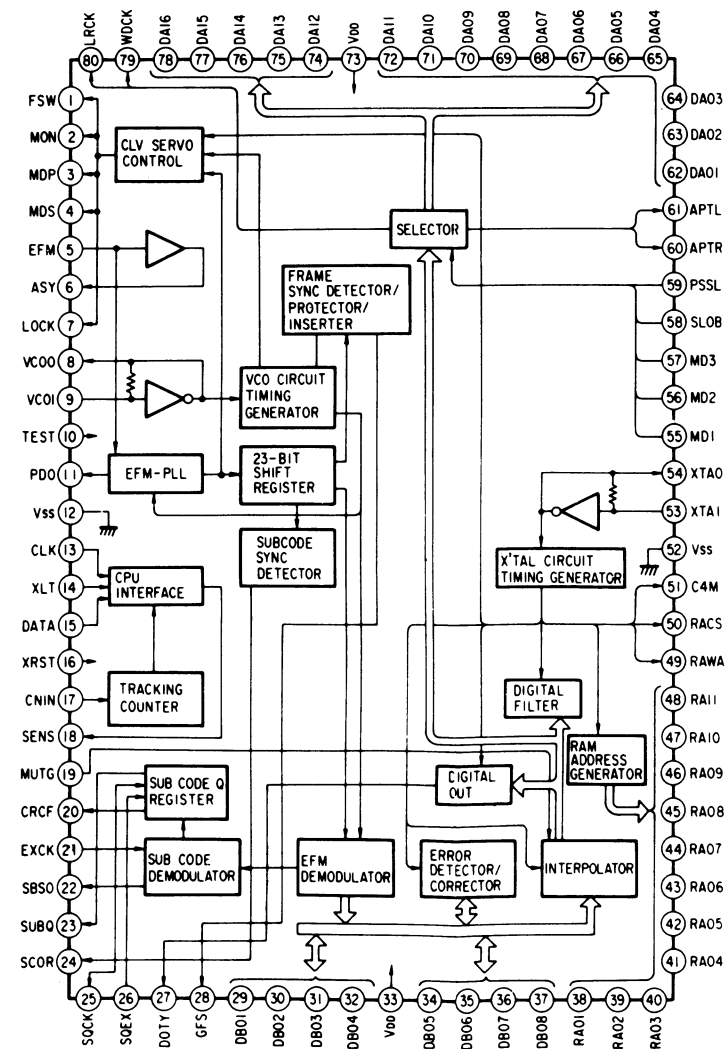
IC301

CXD1161M



IC601

CXD1130Q





SECTION 5


EXPLODED VIEWS

NOTE:

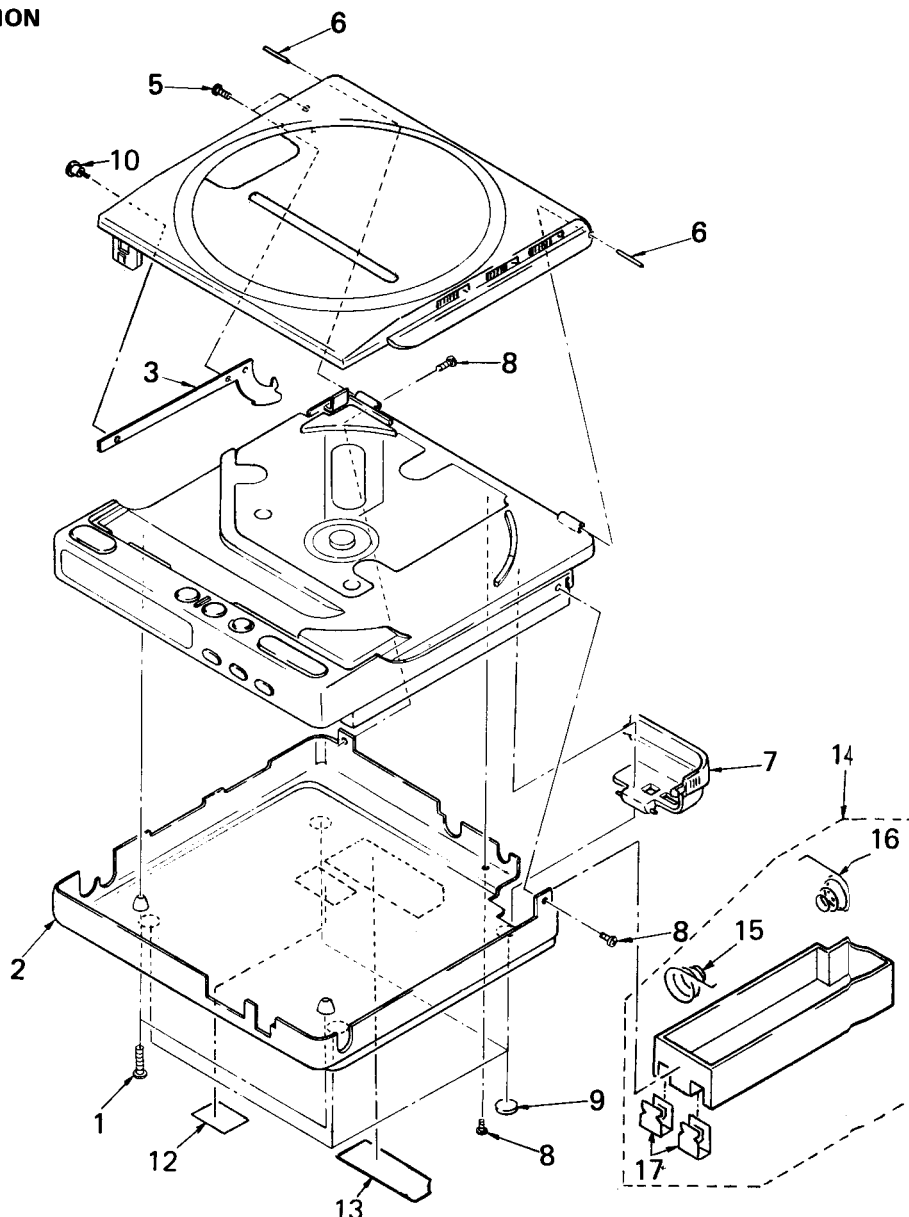
- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

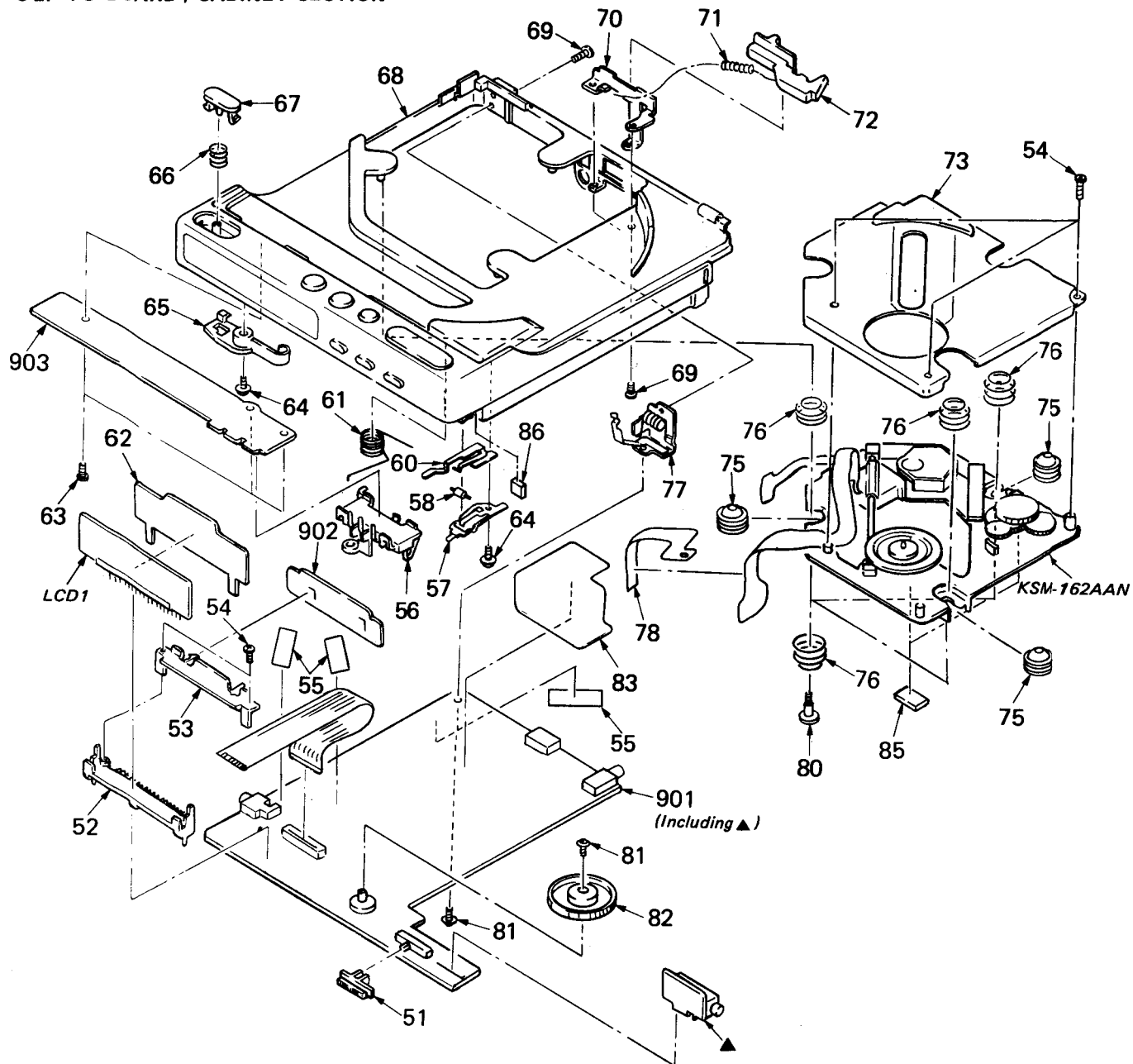
Les composants identifiés par une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

5-1. BOTTOM PANEL SECTION



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	4-908-792-71	SCREW (B2X6), TAPPING, P1		13	*4-924-786-01	(AEP)....LABEL, MODEL NUMBER (AE5)	
2	X-4924-712-1	PLATE ASSY, BOTTOM			*4-924-788-01	(US,Canadian)...LABEL, MODEL NUMBER (U)	
3	4-924-713-01	ARM, SWITCHING			*4-926-601-01	(UK,E,French,Australian) ...LABEL, MODEL NUMBER (E)	
5	4-924-765-01	SCREW (M1.4), SPECIAL HEAD			*4-924-759-01	(Italian)...LABEL, MODEL NUMBER (ITI)	
6	4-924-714-01	SHAFT (FULCRUM)					
7	4-924-734-21	LID, BATTERY CASE		14	X-4918-806-1	(UK)...CASE ASSY (BLACK), BATTERY	15-17
8	3-703-816-52	SCREW (M1.4X3.5), SPECIAL HEAD		15	4-918-803-01	(UK)...SPRING	
9	4-912-641-11	FOOT, RUBBER		16	2-298-630-01	(UK)...SPRING (RIGHT)	
10	3-329-697-11	SCREW, STEP, PRECISION		17	4-918-814-01	(UK)...TERMINAL BOARD (B)	
12	*4-885-838-00	(AEP,UK,French,Italian)...LABEL,CLASS 1					

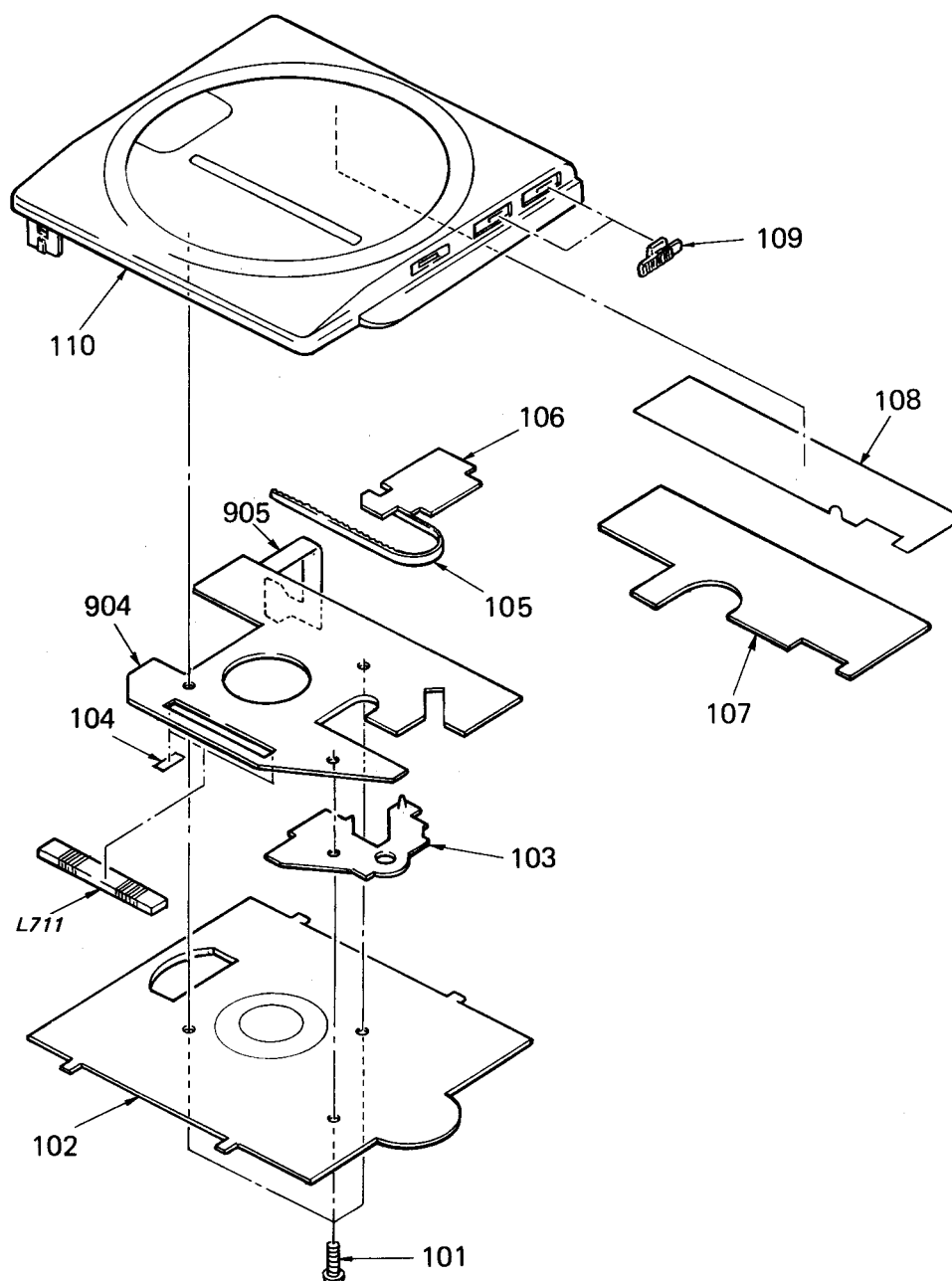
5-2. PC BOARD / CABINET SECTION



No.	Part No.	Description	Remarks
51	4-924-724-01	KNOB (HOLD)	
52	*4-924-730-01	HOLDER, LCD	
53	*4-924-781-01	HOLDER (LED)	
54	3-893-942-01	SCREW (1.7X4), TAPPING (B)	
55	*3-561-902-00	CLOTH, RETAINING, CASSETTE	
56	4-924-731-01	SPRING	
57	4-924-763-01	SPRING (BSA)	
58	4-924-701-01	ROLLER, BS	
60	4-924-702-01	SPRING (BSB)	
61	4-924-712-01	SPRING, TORSION	
62	4-924-709-01	PLATE, LIGHT GUIDE	
63	4-908-792-71	SCREW (B2X6), TAPPING, P1	
64	4-924-703-01	SCREW (B1.7X4), TAPPING	
65	4-924-711-01	CLAW, LID LOCK	
66	3-553-530-00	SPRING, COMPRESSION	
67	4-924-760-01	BUTTON (OPEN)	
68	X-4924-711-1	CABINET ASSY	
69	3-703-816-52	SCREW (M1.4X3.5), SPECIAL HEAD	

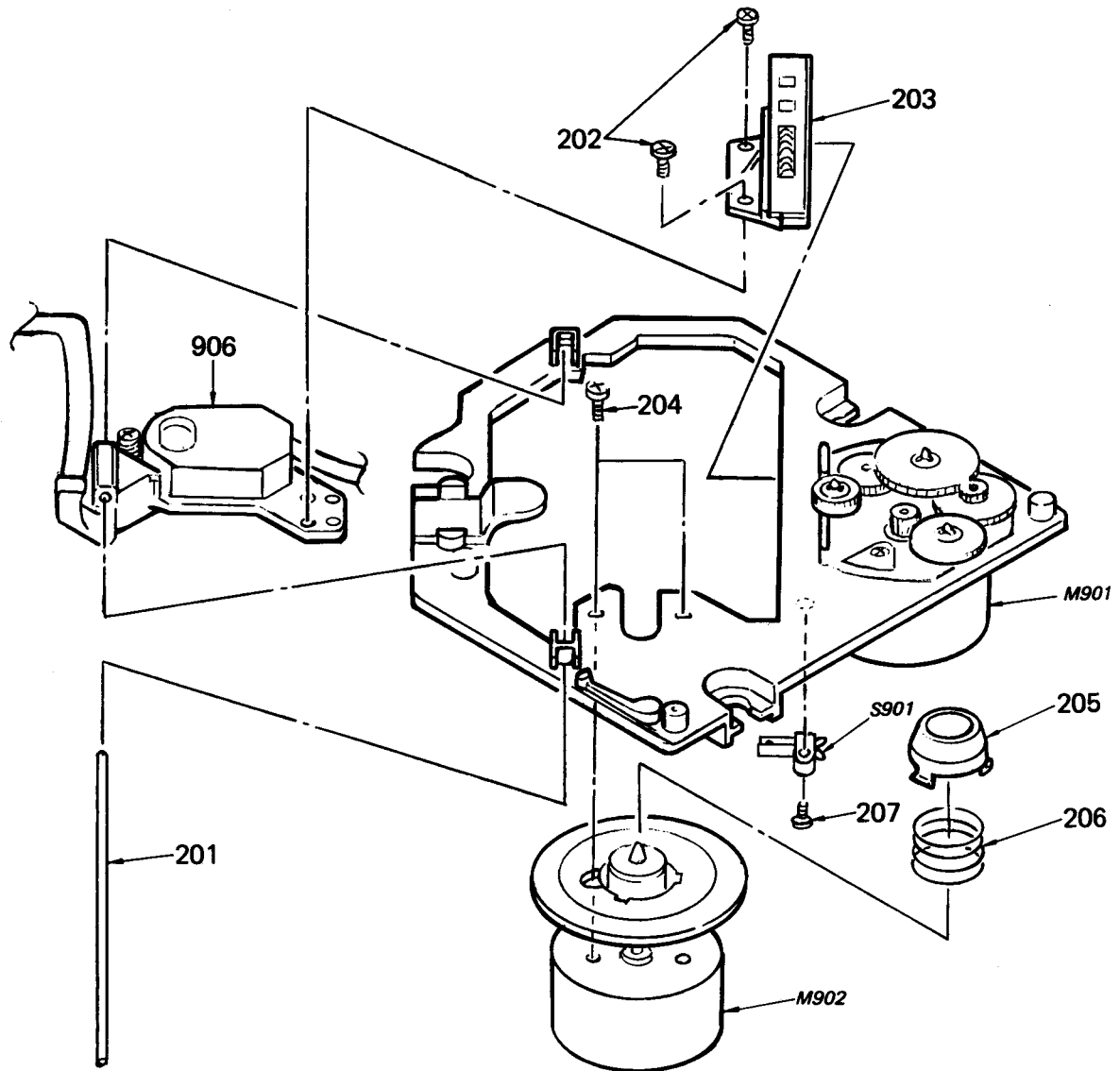
No.	Part No.	Description	Remarks
70	*4-924-721-01	BRACKET, LOCK CLAW	
71	3-565-923-00	SPRING, COMPRESSION	
72	4-924-733-01	KNOB (LOCK CLAW)	
73	X-4924-702-1	COVER ASSY (BLACK), MD	
75	4-924-705-01	INSULATOR	
76	4-924-710-01	SPRING, COMPRESSION	
77	*X-4924-701-1	SPRING ASSY, CLICK	
78	4-924-761-01	PAPER (A), SHIELD	
80	4-924-718-01	SCREW, INSULATOR	
81	3-335-797-21	SCREW (M1.4X3), TOOTHED LOCK	
82	4-924-732-01	KNOB (VOLUME)	
83	*4-924-784-01	SHEET, PROTECTION	
85	9-911-839-XX	SPACER	
86	*3-329-460-01	SPACER	
901	A-3015-626-A	PC BOARD ASSY, MAIN	
902	*1-626-480-11	PC BOARD, LED	
903	*1-625-771-11	PC BOARD, CONTROL	

5-3. UPPER PANEL SECTION



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
101	3-893-942-01	SCREW (B1.7X4)		110	X-4924-713-1	(US,Canadian,UK,E,Australia)	
102	A-3039-654-A	COVER ASSY, TUNER			X-4924-714-1	(AEP,French,Italian).LID ASS Y, UPPER	
103	*4-924-773-01	GUIDE, TU		904	A-3015-627-A	(US,Canadian,UK,E,Australia)	
104	3-831-441-XX	SPACER			A-3015-656-A	(AEP,French).....PC BOARD A; SY, RADIO	
105	*4-924-771-01	RACK, POINTER			A-3015-673-A	(Italian).....PC BOARD A; SY, RADIO	
106	*4-918-884-01	SHEET, COVER		905	1-626-980-11	FREXIBLE BOARD, TU	
107	*4-924-774-01	PLATE (T), SHIELD		L711	1-402-381-11	ANTENNA, FERRITE-ROD (AM)	
108	*4-924-787-01	SHEET (SHIELD PAPER), ADHESIVE					
109	4-924-770-01	BUTTON (T MODE)					

5-4. MECHANISM SECTION
(KSM-162A)



No.	Part No.	Description	Remarks
201	2-641-534-01	SHAFT	
202	7-627-852-18	SCREW, PRECISION +P 1.7X4 TYPE3	
203	X-2641-523-1	RACK ASSY	
204	7-627-552-88	SCREW, PRECISION +P 1.7X2.2	
205	2-641-539-01	RING, CENTER	
206	2-641-524-01	SPRING (A), COMPRESSION	

No.	Part No.	Description	Remarks
207	7-685-103-19	SCREW +P 2X5 TYPE2 NON-SLIT	
906	Δ 8-848-081-21	PICKUP, OPTICAL KSS-162A	
M901	X-2641-525-1	MOTOR ASSY	
M902	X-2641-521-1	MOTOR ASSY, T.T.	
S901	1-570-112-11	SWITCH, LEAF (LIMIT SWITCH)	

Note:
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Note:
Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No.	Part No.	Description			
C527	1-163-081-00	CERAMIC CHIP 0.22MF		25V	
C528	1-126-153-11	ELECT 22MF	20%	6.3V	
C529	1-163-125-00	CERAMIC CHIP 220PF	5%	50V	
C531	1-163-038-00	CERAMIC CHIP 0.1MF		25V	
C532	1-163-038-00	CERAMIC CHIP 0.1MF		25V	
C533	1-162-638-11	CERAMIC CHIP 1MF		16V	
C534	1-163-038-00	CERAMIC CHIP 0.1MF		25V	
C535	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	
C536	1-163-078-11	CERAMIC CHIP 0.033MF	10%	25V	
C537	1-135-145-11	TANTAL. CHIP 0.47MF	20%	25V	
C538	1-124-434-00	ELECT 220MF	20%	4V	
C539	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	
C540	1-162-637-11	CERAMIC CHIP 0.47MF		16V	
C543	1-124-255-00	ELECT 1MF	20%	50V	
C544	1-126-157-11	ELECT 10MF	20%	16V	
C546	1-163-986-00	CERAMIC CHIP 0.027MF	10%	25V	
C547	1-162-638-11	CERAMIC CHIP 1MF		16V	
C548	1-126-162-11	ELECT 3.3MF	20%	50V	
C549	1-126-157-11	ELECT 10MF	20%	16V	
C550	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V	
C551	1-126-157-11	ELECT 10MF	20%	16V	
C552	1-124-255-00	ELECT 1MF	20%	50V	
C553	1-162-638-11	CERAMIC CHIP 1MF		16V	
C554	1-162-637-11	CERAMIC CHIP 0.47MF		16V	
C555	1-163-081-00	CERAMIC CHIP 0.22MF		25V	
C556	1-163-143-00	CERAMIC CHIP 0.0012MF	10%	50V	
C557	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	
C558	1-163-038-00	CERAMIC CHIP 0.1MF		25V	
C559	1-124-584-00	ELECT 100MF	20%	10V	
C561	1-163-038-00	CERAMIC CHIP 0.1MF		25V	
C562	1-162-638-11	CERAMIC CHIP 1MF		16V	
C601	1-163-038-00	CERAMIC CHIP 0.1MF		25V	
C602	1-163-101-00	CERAMIC CHIP 22PF	5%	50V	
C603	1-163-101-00	CERAMIC CHIP 22PF	5%	50V	
C604	1-163-038-00	CERAMIC CHIP 0.1MF		25V	
C605	1-162-638-11	CERAMIC CHIP 1MF		16V	
C606	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C607	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V	
C701	1-163-013-00	CERAMIC CHIP 0.0022MF	10%	50V	
C702	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V	
C703	1-163-013-00	CERAMIC CHIP 0.0022MF	10%	50V	
C704	1-163-101-00	CERAMIC CHIP 22PF	5%	50V	
C705	1-163-088-00	CERAMIC CHIP 5PF	0.25PF	50V	
C706	1-135-091-00	TANTAL. CHIP 1MF	20%	16V	
C707	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V	
C708	1-163-101-00	CERAMIC CHIP 22PF	5%	50V	
C709	1-163-085-00	CERAMIC CHIP 2PF	0.25PF	50V	
C710	1-163-125-00	(US,Canadian,UK,E,Australian) ...CERAMIC CHIP 220PF 5%		50V	
C710	1-163-119-00	(AEP,French)..CERAMIC CHIP 120PF 5%		50V	
C710	1-163-120-00	(Italian).....CERAMIC CHIP 130PF 5%		50V	
C712	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C713	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V	

Ref.No.	Part No.	Description			
C714	1-163-038-00	CERAMIC CHIP 0.1MF		25V	
C715	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V	
C717	1-135-091-00	TANTAL. CHIP 1MF	20%	16V	
C720	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	
C725	1-135-091-00	TANTAL. CHIP 1MF	20%	16V	
C728	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V	
C729	1-135-157-21	TANTAL. CHIP 10MF	20%	4V	
C730	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V	
C731	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	
C732	1-163-081-00	CERAMIC CHIP 0.22MF		25V	
C733	1-163-120-00	CERAMIC CHIP 130PF	5%	50V	
C734	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V	
C735	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V	
C736	1-135-157-21	TANTAL. CHIP 10MF	20%	4V	
C737	1-163-101-00	(US,Canadian,UK,E,Australian) ..CERAMIC CHIP 22PF 5%		50V	
C737	1-163-102-00	(AEP,French,Italian) ..CERAMIC CHIP 24PF 5%		50V	
C738	1-163-133-00	CERAMIC CHIP 470PF	5%	50V	
C739	1-163-038-00	CERAMIC CHIP 0.1MF		25V	
C740	1-163-093-00	CERAMIC CHIP 10PF	5%	50V	
C741	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V	
C742	1-135-104-00	TANTAL. CHIP 10MF	20%	4V	
C743	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V	
C744	1-163-123-00	CERAMIC CHIP 180PF	5%	50V	
C745	1-135-103-00	TANTAL. CHIP 3.3MF	20%	4V	
C746	1-135-145-11	TANTAL. CHIP 0.47MF	20%	25V	
C747	1-135-072-21	TANTAL. CHIP 0.22MF	20%	35V	
C748	1-135-145-11	TANTAL. CHIP 0.47MF	20%	25V	
C749	1-163-205-00	CERAMIC CHIP 0.001MF	5%	50V	
C750	1-163-113-00	CERAMIC CHIP 68PF	5%	50V	
C751	1-163-013-00	CERAMIC CHIP 0.0022MF	10%	50V	
C752	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V	
C753	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V	
C754	1-163-013-00	CERAMIC CHIP 0.0022MF	10%	50V	
C755	1-163-013-00	CERAMIC CHIP 0.0022MF	10%	50V	
C756	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V	
C757	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V	
C758	1-135-157-21	TANTAL. CHIP 10MF	20%	4V	
C759	1-135-096-21	TANTAL. CHIP 4.7MF	20%	10V	
C761	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V	
C762	1-135-157-21	TANTAL. CHIP 10MF	20%	4V	
C763	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V	
C764	1-135-096-21	TANTAL. CHIP 4.7MF	20%	10V	
C765	1-135-096-21	TANTAL. CHIP 4.7MF	20%	10V	
C766	1-135-096-21	TANTAL. CHIP 4.7MF	20%	10V	
C767	1-135-096-21	TANTAL. CHIP 4.7MF	20%	10V	
C768	1-163-113-00	CERAMIC CHIP 68PF	5%	50V	
C769	1-135-092-21	TANTAL. CHIP 3.3MF	20%	16V	
C770	1-163-145-00	CERAMIC CHIP 0.0015MF	10%	50V	
C771	1-163-013-00	CERAMIC CHIP 0.0022MF	10%	50V	
C772	1-135-157-21	TANTAL. CHIP 10MF	20%	4V	
C773	1-163-145-00	CERAMIC CHIP 0.0015MF	10%	50V	
C776	1-163-063-00	CERAMIC CHIP 0.022MF	10%	50V	
C777	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V	
C778	1-163-013-00	CERAMIC CHIP 0.0022MF	10%	50V	
C780	1-135-091-00	TANTAL. CHIP 1MF	20%	16V	

Ref.No.	Part No.	Description		
C781	1-163-100-00	CERAMIC CHIP 20PF	5%	50V
C782	1-163-133-00	CERAMIC CHIP 470PF	5%	50V
C783	1-163-019-00	CERAMIC CHIP 0.0068MF	10%	50V
C784	1-163-036-00	CERAMIC CHIP 0.068MF		50V
C785	1-135-091-00	TANTAL. CHIP 1MF	20%	16V
C786	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V
C787	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V
C788	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V
C801	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V
C802	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C803	1-124-257-00	ELECT 2.2MF	20%	50V
C804	1-124-257-00	ELECT 2.2MF	20%	50V
C805	1-163-113-00	CERAMIC CHIP 68PF	5%	50V
C806	1-163-113-00	CERAMIC CHIP 68PF	5%	50V
C807	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V
C808	1-162-638-11	CERAMIC CHIP 1MF		16V
C809	1-135-091-00	TANTAL. CHIP 1MF	20%	16V
C810	1-162-638-11	CERAMIC CHIP 1MF		16V
C811	1-163-038-00	CERAMIC CHIP 0.1MF		25V
CF701	1-567-338-65	FILTER, CERAMIC		
CF702	1-567-338-65	FILTER, CERAMIC		
CF703	1-567-338-65	FILTER, CERAMIC		
CN301	1-563-995-11	CONNECTOR, FPC (ZIF) 5P		
CN501	1-566-976-11	SOCKET, CONNECTOR 12P		
CN502	1-565-309-11	CONNECTOR, FLEXIBLE 4P		
CN801	1-563-589-11	CONNECTOR, FLEXIBLE 12P		
CN802	1-563-615-11	CONNECTOR, FLEXIBLE 12P		
CNJ401	1-562-961-11	JACK (DC IN 9V)		
CT701	1-141-313-11	CAP, VAR, TRIMMER (CHIP TYPE)		
CT703	1-141-313-11	CAP, VAR, TRIMMER (CHIP TYPE)		
CT704	1-141-313-11	CAP, VAR, TRIMMER (CHIP TYPE)		
D322	8-719-938-72	DIODE SB01-05CP		
D401	8-719-938-78	DIODE SB10-05PCP		
D402	8-719-106-22	DIODE RD7.5M-B1		
D403	8-719-938-78	DIODE SB10-05PCP		
D405	8-719-938-78	DIODE SB10-05PCP		
D406	8-719-101-23	DIODE 1S5123		
D407	8-719-100-05	DIODE 1S2837		
D409	8-719-938-75	DIODE SB05-05CP		
D410	8-719-938-78	DIODE SB10-05PCP		
D411	8-719-927-82	DIODE SLP478C		
D412	8-719-100-05	DIODE 1S2837		
D413	8-719-938-75	DIODE SB05-05CP		
D415	8-719-927-82	DIODE SLP478C		
D416	8-719-927-82	DIODE SLP478C		
D417	8-719-927-82	DIODE SLP478C		
D418	8-719-105-91	DIODE RD5.6M-B2		
D419	8-719-938-72	DIODE SB01-05CP		
D420	8-719-108-12	DIODE RD9.1EW		
D501	8-719-938-72	DIODE SB01-05CP		
D502	8-719-938-72	DIODE SB01-05CP		
D503	8-719-938-72	DIODE SB01-05CP		
D504	8-719-106-53	DIODE RD10M-B2		
D505	8-719-100-05	DIODE 1S2837		
D506	8-719-108-12	DIODE RD9.1EW		
D507	8-719-911-19	DIODE 1S5119		
D601	8-719-100-05	DIODE 1S2837		
D701	8-719-939-02	DIODE SVC203CP		

Ref.No.	Part No.	Description		
D702	8-719-939-02	DIODE SVC203CP		
D705	8-719-928-03	DIODE KV1260M		
D706	8-719-938-72	DIODE SB01-05CP		
D707	8-719-938-72	DIODE SB01-05CP		
D708	8-719-106-53	DIODE RD10M-B2		
D709	8-719-100-05	DIODE 1S2837		
D710	8-719-938-72	DIODE SB01-05CP		
D711	8-719-105-32	DIODE RD2.7M-B2		
D712	8-719-105-90	DIODE RD5.6M-B1		
D713	8-719-928-16	DIODE SLM-13VM		
D714	8-719-938-72	DIODE SB01-05CP		
D801	8-719-951-22	DIODE 1MN10		
D803	8-719-951-22	DIODE 1MN10		
D804	8-719-100-05	DIODE 1S2837		
D805	8-719-106-70	DIODE RD12M-B1		
D806	8-719-100-05	DIODE 1S2837		
D807	8-719-100-05	DIODE 1S2837		
D808	8-719-100-03	DIODE 1S2835		
D809	8-719-100-03	DIODE 1S2835		
D810	8-719-911-19	DIODE 1S5119		
FL701	1-236-053-11	FILTER, BAND PASS		
IC301	8-759-805-34	IC CXD1161M-3		
IC302	8-759-630-75	IC M51568FP		
IC303	8-759-745-64	IC NJM4560M		
IC401	8-759-939-07	IC BA9700F		
IC501	8-752-033-55	IC CXA1271Q		
IC502	8-752-033-54	IC CXA1272Q-Z		
IC503	8-759-970-89	IC BA10358F		
IC504	8-759-030-17	IC MPC1715		
IC505	8-759-230-43	IC TC7504F		
IC601	8-759-947-03	IC CXD1130Q		
IC602	8-759-320-44	IC CXK5816M-10L		
IC701	8-759-923-96	IC CX10053B		
IC702	8-759-910-53	IC CX10054		
IC801	8-752-804-07	IC CXP5086-026Q		
IC802	8-759-700-07	IC NJM2903M		
J301	1-565-310-11	JACK (LINE OUT)		
J302	1-565-311-11	JACK (PHONES)		
J801	1-562-870-31	JACK (REMOTE)		
JR303	1-216-295-00	METAL GLAZE	0	5% 1/10W
JR304	1-216-295-00	METAL GLAZE	0	5% 1/10W
JR305	1-216-296-00	METAL GLAZE	0	5% 1/8W
JR307	1-216-295-00	METAL GLAZE	0	5% 1/10W
JR401	1-216-295-00	METAL GLAZE	0	5% 1/10W
JR402	1-216-295-00	METAL GLAZE	0	5% 1/10W
JR403	1-216-295-00	METAL GLAZE	0	5% 1/10W
JR404	1-216-295-00	METAL GLAZE	0	5% 1/10W
JR406	1-216-296-00	METAL GLAZE	0	5% 1/8W
JR501	1-216-295-00	METAL GLAZE	0	5% 1/10W
JR502	1-216-295-00	METAL GLAZE	0	5% 1/10W
JR701	1-216-296-00	METAL GLAZE	0	5% 1/8W
JR702	1-216-296-00	METAL GLAZE	0	5% 1/8W
JR703	1-216-296-00	METAL GLAZE	0	5% 1/8W
JR704	1-216-296-00	METAL GLAZE	0	5% 1/8W
JR705	1-216-295-00	METAL GLAZE	0	5% 1/10W
JR707	1-216-295-00	METAL GLAZE	0	5% 1/10W
JR708	1-216-296-00	METAL GLAZE	0	5% 1/8W

Ref.No.	Part No.	Description
JR713	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR714	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR715	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR716	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR717	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR720	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR722	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR723	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR724	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR725	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR726	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR727	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR728	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR729	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR730	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR731	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR732	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR733	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR734	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR735	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR736	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR737	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR738	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR739	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR740	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR741	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR742	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR743	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR744	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR745	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR746	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR747	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR748	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR749	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR750	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR751	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR752	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR753	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR754	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR757	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR758	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR759	1-216-295-00	METAL GLAZE 0 5% 1/10W
L101	1-410-196-11	INDUCTOR CHIP 2.2UH
L102	1-410-196-11	INDUCTOR CHIP 2.2UH
L201	1-410-196-11	INDUCTOR CHIP 2.2UH
L202	1-410-196-11	INDUCTOR CHIP 2.2UH
L301	1-410-196-11	INDUCTOR CHIP 2.2UH
L302	1-410-196-11	INDUCTOR CHIP 2.2UH
L401	1-459-842-11	COIL (WITH CORE)
L402	1-412-038-11	INDUCTOR CHIP 100UH
L403	1-412-037-11	INDUCTOR CHIP 47UH
L501	1-412-036-11	INDUCTOR CHIP 10UH
L502	1-412-039-51	INDUCTOR CHIP 100UH
L503	1-412-038-11	INDUCTOR CHIP 100UH
L504	1-412-038-11	INDUCTOR CHIP 100UH
L505	1-412-039-51	INDUCTOR CHIP 100UH
L506	1-412-036-11	INDUCTOR CHIP 10UH

Ref.No.	Part No.	Description
L701	1-459-641-11	COIL (WITH CORE)
L702	1-459-642-11	COIL (WITH CORE)
L705	1-410-209-51	INDUCTOR CHIP 27UH
L706	1-410-196-11	INDUCTOR CHIP 2.2UH
L708	1-410-204-31	INDUCTOR CHIP 10UH
L710	1-410-209-51	INDUCTOR CHIP 27UH
L711	1-402-381-11	ANTENNA, FERRITE-ROD (MW)
L712	1-410-209-51	INDUCTOR CHIP 27UH
L713	1-410-196-11	INDUCTOR CHIP 2.2UH
LCD1	1-808-354-11	LCD MODULE
M901	X-2641-525-1	MOTOR ASSY (SLED)
M902	X-2641-521-1	MOTOR ASSY, T.T. (SPINDLE)
MF701	1-567-693-11	FILTER, CERAMIC
Q301	8-729-800-36	TRANSISTOR 2SD1048
Q302	8-729-800-36	TRANSISTOR 2SD1048
Q303	8-729-800-36	TRANSISTOR 2SD1048
Q304	8-729-800-36	TRANSISTOR 2SD1048
Q305	8-729-800-36	TRANSISTOR 2SD1048
Q306	8-729-800-36	TRANSISTOR 2SD1048
Q307	8-729-800-36	TRANSISTOR 2SD1048
Q401	8-729-901-46	TRANSISTOR DTA114YK
Q402	8-729-902-99	TRANSISTOR DTC114TK
Q403	8-729-162-44	TRANSISTOR 2SB624-BV4
Q404	9-989-161-01	TRANSISTOR 2SC2412K
Q405	8-729-800-36	TRANSISTOR 2SD1048
Q406	9-989-161-01	TRANSISTOR 2SC2412K
Q407	8-729-806-75	TRANSISTOR 2SB1120
Q408	8-729-901-00	TRANSISTOR DTC124EK
Q409	8-729-100-76	TRANSISTOR 2SA812
Q410	8-729-162-44	TRANSISTOR 2SB624-BV4
Q412	8-729-800-36	TRANSISTOR 2SD1048
Q413	8-729-806-75	TRANSISTOR 2SB1120
Q414	8-729-903-10	TRANSISTOR FMW1
Q418	8-729-901-00	TRANSISTOR DTC124EK
Q419	8-729-901-00	TRANSISTOR DTC124EK
Q420	9-989-161-01	TRANSISTOR 2SC2412K
Q421	8-729-901-05	TRANSISTOR DTA124EK
Q422	8-729-800-36	TRANSISTOR 2SD1048
Q423	8-729-907-28	TRANSISTOR IMD3
Q424	8-729-903-10	TRANSISTOR FMW1
Q501	8-729-100-76	TRANSISTOR 2SA812
Q502	8-729-800-36	TRANSISTOR 2SD1048
Q503	8-729-902-99	TRANSISTOR DTC114TK
Q504	9-989-161-01	TRANSISTOR 2SC2412K
Q506	8-729-903-29	TRANSISTOR DTA144TK
Q701	8-729-200-87	TRANSISTOR 2SC2714Y
Q702	8-729-102-07	TRANSISTOR 2SC2223-F13
Q703	8-729-102-08	TRANSISTOR 2SC2223-F14
Q706	8-729-102-08	TRANSISTOR 2SC2223-F14
Q707	8-729-159-64	TRANSISTOR 2SD596
Q708	8-729-903-62	TRANSISTOR 2SD1664-Q
Q710	8-729-159-64	TRANSISTOR 2SD596
Q711	8-729-102-26	TRANSISTOR 2SC1623
Q712	8-729-100-66	TRANSISTOR 2SB624BV4
Q713	8-729-901-01	TRANSISTOR DTC144EK

Ref.No.	Part No.	Description
Q714	8-729-100-66	TRANSISTOR 2SC1623
Q715	8-729-901-01	TRANSISTOR DTC144EK
Q801	8-729-901-05	TRANSISTOR DTA124EK
Q802	8-729-800-36	TRANSISTOR 2SD1048
Q803	8-729-907-28	TRANSISTOR IMD3
R101	1-216-329-11	METAL GLAZE 5.1K 1% 1/10W
R102	1-216-336-11	METAL GLAZE 47K 1% 1/10W
R103	1-216-333-11	METAL GLAZE 15K 1% 1/10W
R104	1-218-160-11	METAL GLAZE 43K 1% 1/10W
R105	1-216-328-11	METAL GLAZE 4.3K 1% 1/10W
R106	1-216-333-11	METAL GLAZE 15K 1% 1/10W
R107	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W
R108	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W
R109	1-216-077-00	METAL GLAZE 15K 5% 1/10W
R110	1-216-009-00	METAL GLAZE 22 5% 1/10W
R111	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R112	1-216-033-00	METAL GLAZE 220 5% 1/10W
R113	1-216-081-00	METAL GLAZE 22K 5% 1/10W
R114	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W
R115	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R116	1-216-097-00	METAL GLAZE 100K 5% 1/10W
R201	1-216-329-11	METAL GLAZE 5.1K 1% 1/10W
R202	1-216-336-11	METAL GLAZE 47K 1% 1/10W
R203	1-216-333-11	METAL GLAZE 15K 1% 1/10W
R204	1-218-160-11	METAL GLAZE 43K 1% 1/10W
R205	1-216-328-11	METAL GLAZE 4.3K 1% 1/10W
R206	1-216-333-11	METAL GLAZE 15K 1% 1/10W
R207	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W
R208	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W
R209	1-216-077-00	METAL GLAZE 15K 5% 1/10W
R210	1-216-009-00	METAL GLAZE 22 5% 1/10W
R211	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R212	1-216-182-00	METAL GLAZE 220 5% 1/8W
R213	1-216-081-00	METAL GLAZE 22K 5% 1/10W
R214	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W
R215	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R216	1-216-097-00	METAL GLAZE 100K 5% 1/10W
R303	1-216-121-00	METAL GLAZE 1M 5% 1/10W
R304	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W
R305	1-216-019-00	METAL GLAZE 56 5% 1/10W
R312	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W
R319	1-216-113-00	METAL GLAZE 470K 5% 1/10W
R320	1-216-113-00	METAL GLAZE 470K 5% 1/10W
R321	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W
R323	1-216-077-00	METAL GLAZE 15K 5% 1/10W
R324	1-216-077-00	METAL GLAZE 15K 5% 1/10W
R325	1-216-019-00	METAL GLAZE 56 5% 1/10W
R326	1-216-019-00	METAL GLAZE 56 5% 1/10W
R327	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W
R328	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W
R401	1-216-077-00	METAL GLAZE 15K 5% 1/10W
R402	1-216-089-00	METAL GLAZE 47K 5% 1/10W
R403	1-216-089-00	METAL GLAZE 47K 5% 1/10W
R404	1-216-037-00	METAL GLAZE 330 5% 1/10W
R405	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W
R406	1-216-081-00	METAL GLAZE 22K 5% 1/10W

Ref.No.	Part No.	Description
R407	1-216-089-00	METAL GLAZE 47K 5% 1/10W
R408	1-216-049-00	METAL GLAZE 1K 5% 1/10W
R409	1-216-077-00	METAL GLAZE 15K 5% 1/10W
R410	1-216-083-00	METAL GLAZE 27K 5% 1/10W
R411	1-216-089-00	METAL GLAZE 47K 5% 1/10W
R412	1-216-093-00	METAL GLAZE 68K 5% 1/10W
R413	1-216-077-00	METAL GLAZE 15K 5% 1/10W
R414	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W
R415	1-216-339-11	METAL GLAZE 18K 1% 1/10W
R416	1-216-335-11	METAL GLAZE 24K 1% 1/10W
R417	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W
R418	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W
R419	1-216-045-00	METAL GLAZE 680 5% 1/10W
R420	1-216-041-00	METAL GLAZE 470 5% 1/10W
R421	1-216-092-00	METAL GLAZE 62K 5% 1/10W
R422	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W
R423	1-216-045-00	METAL GLAZE 680 5% 1/10W
R424	1-216-081-00	METAL GLAZE 22K 5% 1/10W
R425	1-216-049-00	METAL GLAZE 1K 5% 1/10W
R426	1-216-033-00	METAL GLAZE 220 5% 1/10W
R427	1-216-056-00	METAL GLAZE 2K 5% 1/10W
R428	1-216-062-00	METAL GLAZE 3.6K 5% 1/10W
R429	1-216-095-00	METAL GLAZE 82K 5% 1/10W
R430	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W
R431	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R432	1-216-043-00	METAL GLAZE 560 5% 1/10W
R434	1-216-043-00	METAL GLAZE 560 5% 1/10W
R436	1-216-694-11	METAL CHIP 62K 0.50% 1/10W
R437	1-216-686-11	METAL CHIP 30K 0.50% 1/10W
R438	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W
R439	1-216-695-11	METAL CHIP 68K 0.50% 1/10W
R440	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R441	1-216-049-00	METAL GLAZE 1K 5% 1/10W
R442	1-216-075-00	METAL GLAZE 12K 5% 1/10W
R443	1-216-085-00	METAL GLAZE 33K 5% 1/10W
R446	1-216-009-00	METAL GLAZE 22 5% 1/10W
R448	1-216-041-00	METAL GLAZE 470 5% 1/10W
R449	1-216-748-11	METAL GLAZE 39K 1% 1/10W
R450	1-216-115-00	METAL GLAZE 560K 5% 1/10W
R451	1-216-115-00	METAL GLAZE 560K 5% 1/10W
R452	1-216-049-00	METAL GLAZE 1K 5% 1/10W
R501	1-216-024-00	METAL GLAZE 91 5% 1/10W
R502	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W
R503	1-216-049-00	METAL GLAZE 1K 5% 1/10W
R504	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R506	1-216-081-00	METAL GLAZE 22K 5% 1/10W
R508	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W
R509	1-216-077-00	METAL GLAZE 15K 5% 1/10W
R510	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R511	1-216-150-00	METAL GLAZE 10 5% 1/8W
R512	1-216-085-00	METAL GLAZE 33K 5% 1/10W
R513	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R514	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R515	1-216-097-00	METAL GLAZE 100K 5% 1/10W
R516	1-216-121-00	METAL GLAZE 1M 5% 1/10W
R517	1-216-093-00	METAL GLAZE 68K 5% 1/10W
R518	1-216-097-00	METAL GLAZE 100K 5% 1/10W

Ref.No.	Part No.	Description			
R519	1-216-119-00	METAL GLAZE	820K	5%	1/10W
R520	1-216-095-00	METAL GLAZE	82K	5%	1/10W
R521	1-216-095-00	METAL GLAZE	82K	5%	1/10W
R522	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R523	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R524	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R525	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R526	1-216-114-00	METAL GLAZE	510K	5%	1/10W
R528	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R529	1-216-686-11	METAL CHIP	30K	0.50%	1/10W
R530	1-216-686-11	METAL CHIP	30K	0.50%	1/10W
R531	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R532	1-216-103-00	METAL GLAZE	180K	5%	1/10W
R533	1-216-062-00	METAL GLAZE	3.6K	5%	1/10W
R534	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R536	1-216-099-00	METAL GLAZE	120K	5%	1/10W
R537	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R538	1-216-094-00	METAL GLAZE	75K	5%	1/10W
R539	1-216-094-00	METAL GLAZE	75K	5%	1/10W
R540	1-216-086-00	METAL GLAZE	36K	5%	1/10W
R544	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R545	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R546	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R547	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R548	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R549	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R550	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R551	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R552	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R553	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R554	1-216-033-00	METAL GLAZE	220	5%	1/10W
R555	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R556	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R557	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R558	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R559	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R560	1-216-129-00	METAL GLAZE	2.2M	5%	1/10W
R561	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R601	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R602	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R701	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R702	1-216-025-00	METAL GLAZE	100	5%	1/10W
R703	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R704	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R705	1-216-113-00	METAL GLAZE	470K	5%	1/10W



Ref.No.	Part No.	Description			
R706	1-216-025-00	METAL GLAZE	100	5%	1/10W
R707	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R708	1-216-017-00	METAL GLAZE	47	5%	1/10W
R709	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R710	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R711	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R712	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R713	1-216-013-00	METAL GLAZE	33	5%	1/10W
R714	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R715	1-216-041-00	METAL GLAZE	470	5%	1/10W
R716	1-216-037-00	METAL GLAZE	330	5%	1/10W
R725	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R726	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R727	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R728	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R729	1-216-180-00	METAL GLAZE	180	5%	1/8W
R730	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R731	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R732	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R733	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R734	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R735	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W
R736	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R737	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R738	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R739	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R740	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R741	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R742	1-216-037-00	METAL GLAZE	330	5%	1/10W
R743	1-216-033-00	METAL GLAZE	220	5%	1/10W
R744	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R745	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R747	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R749	1-216-037-00	METAL GLAZE	330	5%	1/10W
R750	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R753	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R755	1-216-093-00	METAL GLAZE	68K	5%	1/10W
R756	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R761	1-216-013-00	METAL GLAZE	33	5%	1/10W
R762	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W
R763	1-216-150-00	METAL GLAZE	10	5%	1/8W
R764	1-216-013-00	METAL GLAZE	33	5%	1/10W
R765	1-216-013-00	METAL GLAZE	33	5%	1/10W
R768	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R769	1-216-081-00	METAL GLAZE	22K	5%	1/10W


Ref.No.	Part No.	Description
R770	1-216-097-00	METAL GLAZE 100K 5% 1/10W
R771	1-216-033-00	METAL GLAZE 220 5% 1/10W
R772	1-216-025-00	METAL GLAZE 100 5% 1/10W
R773	1-216-049-00	METAL GLAZE 1K 5% 1/10W
R801	1-216-089-00	METAL GLAZE 47K 5% 1/10W
R802	1-216-238-00	METAL GLAZE 47K 5% 1/8W
R803	1-216-109-00	METAL GLAZE 330K 5% 1/10W
R804	1-216-041-00	METAL GLAZE 470 5% 1/10W
R806	1-216-089-00	METAL GLAZE 47K 5% 1/10W
R807	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R808	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W
R809	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W
R810	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W
R811	1-216-077-00	METAL GLAZE 15K 5% 1/10W
R812	1-216-077-00	METAL GLAZE 15K 5% 1/10W
R813	1-216-077-00	METAL GLAZE 15K 5% 1/10W
R814	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W
RV301	1-237-092-11	RES, VAR, CARBON 10K/10K (VOL)
RV401	1-228-993-00	RES, ADJ, CARBON 5K
RV501	1-228-996-00	RES, ADJ, CARBON 50K
RV502	1-228-996-00	RES, ADJ, CARBON 50K
RV503	1-228-995-00	RES, ADJ, CARBON 20K
RV504	1-230-526-11	RES, ADJ, METAL GLAZE 47K
RV505	1-228-990-00	RES, ADJ, CARBON 1K
RV701	1-230-602-11	RES, ADJ, METAL GLAZE 4.7K
RV702	1-228-356-00	RES, ADJ, METAL GLAZE 22K
RV703	1-228-356-00	RES, ADJ, METAL GLAZE 22K
RV704	1-237-139-11	RES, VAR, CARBON 100K (TUNING)
S401	1-554-843-11	SWITCH, SLIDE (FUNCTION)
S701	1-570-397-11	SWITCH, SLIDE (FM MODE)
S702	1-570-402-11	SWITCH, SLIDE (BAND)
S801	1-554-911-11	SWITCH, LEAF (OPEN)
S803	1-554-371-51	SWITCH, TACT (▶▶▶)
S804	1-554-371-51	SWITCH, TACT (■)
S805	1-554-371-51	SWITCH, TACT (▶▶▶)
S806	1-554-371-51	SWITCH, TACT (◀◀◀)
S807	1-571-484-11	SWITCH, KEY BOARD (MODE)
S901	1-570-112-11	SWITCH, LEAF (LIMIT SWITCH)

Ref.No.	Part No.	Description
T701	1-404-690-11	TRANSFORMER, IF
T702	1-406-177-11	COIL
T703	1-448-302-11	TRANSFORMER, DC-DC CONVERTER
X601	1-567-737-11	VIBRATOR, CRYSTAL (16.9344MHz)
X801	1-567-094-00	VIBRATOR, CERAMIC (3.58MHz)

ACCESSORY & PACKING MATERIAL

△.1-463-694-11	(Canadian).....ADAPTOR, AC (AC-930A)
△.1-463-700-11	(UK).....ADAPTOR, AC (AC-930A)
△.1-463-701-11	(Australian)...ADAPTOR, AC (AC-930A)
△.1-463-702-11	(E).....ADAPTOR, AC (AC-950W)
△.1-463-705-11	(AEP,French,Italian)..ADAPTOR, AC (AC-930 AEP)
△.1-463-968-11	(US).....ADAPTOR, AC (AC-940)
△.1-526-565-00	(E).....AC PLUG ADAPTOR
1-528-220-11	BATTERY, STORAGE, LEAD (BP-3)
1-555-658-21	CORD, CONNECTION
3-764-970-11	(UK)...INSTRUCTION
3-769-980-11	(AEP,UK,E,French,Australian,Italian) ...MANUAL, INSTRUCTION
3-769-980-21	(US,Canadian).....MANUAL, INSTRUCTION
3-769-980-31	(Canadian).....MANUAL, INSTRUCTION
3-769-980-41	(AEP,Italian).....MANUAL, INSTRUCTION
*4-917-797-01	(UK)...CARTON, HEADPHONE
*4-920-407-01	BAG, PROTECTION
4-924-121-01	CASE, ACCESSORY
4-924-126-01	(EXCEPT FOR French)...BELT, CARRYING
4-924-174-01	(French)...BELT, HAND
*4-924-752-01	(US).....INDIVIDUAL CARTON
*4-924-754-01	(Canadian)...INDIVIDUAL CARTON
*4-924-756-01	(UK).....INDIVIDUAL CARTON
*4-924-757-01	(AEP,E,French,Australian,Italian) ...INDIVIDUAL CARTON
4-924-777-01	CASE, CARRING
4-924-798-01	CUSHION (L,R)
8-952-266-89	(UK)...HEADPHONE MDR-A10L/A SET

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.